OIG Information Requests at USS Lead

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Morgan Collier	4/27/20	
Reviewed by: Bakari Baker	7/14/20	[X]: I reviewed this WP and found it satisfactory. (No comments were provided.) []: I reviewed this WP and found it satisfactory. I also included comments in a dark red colored font. []: All comments have been resolved.
Edited by:		

<u>Purpose</u>: To summarize OIG information requests and general correspondence received from EPA staff working with/at the USS Lead Superfund Site in East Chicago, Indiana.

Project Guide Step #: 41

Source(s):

#	Description/Title	Source Document	
1	Source 1-Request for Initial EPA Staff Contact Information	Link: Source 1-OIG Email USS Lead Information Request 3.27.20.pdf	
2	Source 2-Follow-up Email Requesting Access to Site Documents	Link: Source 2-OIG Email USS Lead Information Request 4.9.19.pdf	
3	Source 3-Follow-up Email from a Document Request Made During OIG's Site Visit	<u>Link:</u> Source 3-OIG Email USS Lead Information Request 6.27.19.pdf	
4	Source 4-OIG Information Request on Lead Based Paint	Link: Source 4-OIG Email USS Lead Information Request 7.2.19.pdf	
5	Source 5-OIG Information Request on Environmental Justice-USS Lead	Link: Source 5-OIG Email USS Lead Information Request 7.30.19.pdf	
6	Source 6-OIG Information Request-Listening Session Inquiry	<u>Link:</u> Source 6-OIG Email USS Lead Information Request 8.19.19.pdf	
7	Source 7-OIG Information Request-CIC and Timeline Questions	Link: Source 7-OIG Email USS Lead Information Request 2.5.20.pdf	
8	Source 8-OIG Information Request-EPA Staff List	Link: Source 8-OIG Email USS Lead Information Request 3.4.20.pdf	
9	Source 9-Attachment of EPA Staff	Link: Source 9-Staff on USS Lead Prior to 2016.pdf	

Scope: The details section gives an overview of the key points from multiple emails received from EPA staff, as it relates to information on the USS Lead Superfund site in East Chicago, Indiana.

Conclusion(s):

1.) ATSDR was the interface for State and Local Health Department on risk communication with local residents at East Chicago [See Details Source 2].

- 2.) EPA staff stated that the new lead dust standard applies to TSCA and does not impact to EPA cleanup at the USS Lead site [See Details Source 4].
- 3.) EJ screening tools were used in 2008, 2011, 2016 [See Details Source 5 Question 1].
- 4.) USS Lead was determined to be within an EJ community [See Details <u>Source 5 Question</u> 2]
- 5.) Information from the CIP was used to add a Spanish speaking CIC and Spanish speaking outreach materials for the site [See Details Source 5 Question 2].
- 6.) Several outcomes from EJ analysis at the site such as trainings for community members, public meetings, open houses with multiple agencies, door to door outreach, external parties coming on site. [See Details Source 5 Question 4, 5, 6].

Details:

Source 1: OIG Information Request-3.27.19

<u>Email Recipients:</u> Samuel Borris (Chief, Emergency Response Branch 2, Region 5, Superfund Division) and Jason El-Zein

Email Question: Requesting list of staff who worked at the USS Lead Superfund Site

Samuel Responded with a list of OSC's and Risk Assessors who worked on site

OIG was referred to Timothy Fischer (Acting Chief, Remedial Response Branch, Branch 1, Region 5, Superfund Division) to get a list of remedial staff working on the site, to which a list was provided.

Source 2: OIG Information Request-4.9.19

Email Recipients: James Mitchell (On-Scene-Coordinator)

<u>Email Question</u>: Asking him to provide the OIG with documentation/access to documentation that was discussed during our interview with him and site team members regarding the USS Lead Superfund Site.

Jim responded that Mark Johnson from ATSDR was the interface for State and Local Health Department on risk communication with local residents at East Chicago.

Auditor's Note *We received access to materials via SharePoint access from another EPA staff member Jacob Hassan*

Source 3: EPA Staff Provided OIG with a Request Made During Site Visit-6.27.19

Email Origination: Sarah Rolfes (Remedial Project Manager)

<u>Email Contents:</u> Environmental Indicator Worksheet for the site (worksheet is under WP. EPA site documentation)

Source 4: OIG Information Request-7.2.19

Email Recipients: Sarah Rolfes (Remedial Project Manager)

<u>Email Question:</u> With the new change in lead dust standards, will this impact EPA's cleanup at the USS Lead Superfund site?

Response: New lead dust standard applies to TSCA and does not impact to EPA cleanup.

Source 5: OIG Information Request 7.30.19

<u>Email Recipient:</u> Sarah Rolfes (Remedial Project Manager), Janet Pope (Community Involvement Coordinator), Charles Rodriguez (Community Involvement Coordinator)

Email Questions/Answers: Answers provided by Sarah Rolfes

- 1.) Did anyone in your region or OLEM-HQ use the EJ screen tool to analyze the USS Lead/East Chicago Superfund site?
 - a. Yes.
 - b. 2008-Environmental Justice Case Criteria for the State of Indiana-removal actions
 - c. **2011-**EJ SEAT
 - d. 2016-EJ Screen Tool-part of Removal Action
- 2.) If yes, what was the outcome and how was the information use?
 - a. EJ screenings indicated USS Lead Superfund site was located within an EJ Community
 - b. Information was used to developed the updated Community Involvement Plan (CIP) and help CIC's plan outreach activities to the community, including addition of a Spanish speaking CIC and Spanish Speaking Outreach Materials
 - c. The CIP was updated in 2018, due to changes in the community involving Zone 1
- 3.) Was there an EJ analysis completed for the site?
 - a. Yes.
 - b. Part of the Time Critical Removal Action in 2008, 2011, 2016
- 4.) If there was an EJ analysis completed, what was the outcome and how was that information used?
 - a. See response to Question 2.
 - b. In addition: EPA hosted Superfund 101 training at the East Chicago Enterprise Academy, conducted Superfund Jobs Training Initiative at Carrie Gosch (15 graduated, many employed at the site or work at other cleanup sites), awarded a technical assistance grant to East Chicago Calumet Coalition Community Advisory Group (ECCC), hosted many public meetings/open houses, hosted Resources for Communities Workshop at Pastrick Library.
 - c. Director of the Office of Environmental Justice visited October 24/25, 2017, and had a meeting with local community leaders, which included members of the ECCC and other local community groups interested in the site.
 - d. EPA conducted outreach in the community (reference the community outreach timeline)

- e. Through EPA's Conflict Prevention and Resolution Center, the region asked the support contract Skeo to conduct a situation assessment on March 2017. Purpose was to learn the factors impacting community engagement and to explore ways to strengthen/enhance those efforts at USS Lead.
 - i. A result of the contract assessment, was that EPA hired an independent, neutral facilitator to hold monthly community meetings. This neutral party facilitated the meetings, made the agendas publically available, and welcomed all community stakeholder groups [meetings included: site-related updates, educational materials, speakers on specific topics requested by the community (example, lead in drinking water), provided opportunity for EPA to answer questions]
 - ii. Conference calls with the Facilitator and CIC prior to meetings allowed representatives of the community groups to identify questions/issues they wanted addressed.
- 5.) Did any EJ considerations impact the EPA's sampling events at the site? If so, how?
 - a. The contractor sampling teams used bilingual staff members when sampling.
 - b. If they were unavailable, EPA staff provided assistance.
- 6.) Did any EJ considerations impact the EPA's communication of human health risks at the site? If so, how?
 - a. Yes.
 - b. EPA went door-to-door multiple times with both English/Spanish speaking employees to:
 - i. get access for sampling
 - ii. provide hand out information provided by ATSDR concerning how to minimize exposure
 - iii. answer general site questions/concerns
 - c. Open houses hosted by EPA, and health agencies to include: Indiana State Department of Health, Great Lakes Center for Children's Environmental Health, East Chicago local health Department, HealthLinc of East Chicago, Agency for Toxic Substances and Disease Registry, Purdue University Extension Nutrition Education Program, Indiana Housing and Community Development Authority, and Sheridan Health Care Services & Community Development Authority. ATSDR and a pediatrician from Great Lakes Center for Children's Environmental Health attended the meetings and answered questions.
 - d. EPA handed out flyers to residents containing information on free blood lead testing provided by the City of East Chicago
 - e. EPA has a dedicated hotline for the public, staff answer/respond to messages from Monday-Friday
 - f. EPA worked with local health department to set up blood lead testing lab at former Carrie Goch Elementary School during the 2016 Removal Actions
 - g. EPA arranged for mobile blood lead testing lab/event in 2018 at community center
 - h. EPA continues to prepare/distribute site information via newsletters, phone calls, in-person meetings

Source 6: OIG Request 8.19.19

Email Recipient: Charles Rodriguez (CIC)

Email Question: Which EPA staff member attended the OIG's listening session at East Chicago?

Email Response: Karen Kirchner, EPA Remedial Project Manager.

Source 7: OIG Request 2.5.20

Email Recipient: Charles Rodriguez (CIC) and Janet Pope (CIC)

Email Question/Answers:

- 1.) When did Charles become a CIC at the USS Lead site?
 - a. Charles became part of the team in 2014
 - b. Before Charles, USS Lead team contractor support was provided for the Spanish speaking residents by the contractor or other EPA staff.
- 2.) Is there an official CAG for the USS Lead? If so, what is the name of the group? When did it apply for the CAG designation and when was it recognized as the CAG for the USS Lead Superfund site?
 - a. No
 - b. EPA does not have a process to official designate or recognize a group as a CAG
 - c. At the USS Lead site, there are at least three active community groups [East Chicago Calumet Coalition (ECCC), Calumet Lives Matter, and the Community Strategy Group]
 - d. ECCC self identifies at the CAG for the USS Lead site; however members of other groups have written EPA and stated that the ECCC does not represent them
 - e. EPA, neutral facilitator, an elected official from area have encouraged groups to come together
 - f. Situation assessment carried out by SKEO, mediation/facilitation services consultant contracted through EPA's Conflict Prevention and Resolution Center. They identified a significant level of conflict amongst the leaders of the groups and SKEO recommended engaging a neutral facilitator who would hold a meeting with the leadership of community groups to introduce EPA monthly community meeting concept/solicit input on meeting format/priority educational topics
 - g. "Community leaders would be reassured that all groups would be treated equally at well-facilitated meetings and that all groups would have an opportunity to submit questions to EPA in advance to inform the development of monthly meeting agendas"→EPA followed this approach
- 3.) Questions on the USS Lead Superfund Site Community Involvement Timeline Activities (2006-Present):
 - a. In July 2010 it mentions that EPA participated in Calumet Days and distributed lead-prevention information. Could you provide us with the information that was distributed?
 - i. Information provided in attachment

- b. In October 2011 it mentions that there were color-coded pages explaining the results and levels of contamination. Could you provide us with a copy of this?
 - i. Information provided in attachment
- c. In August 2013 it mentions that there were gardening and other information handouts distributed at local Walgreens, Riley Park, and the MLK Center. Could you provide us with a copy of the information that was distributed? Did the EPA or another agency or group publish this information?
 - i. The handouts were provided in the attachment, and ATSDR, Indiana State Department of Public Health, Illinois EPA published some of the materials.

Source 8: OIG Request 3.4.20

Email Recipient: Janet Pope (CIC) and Sarah Rolfes (RPM)

Email Question/Answer:

Q: Provide a list of names/titles of Region 5 staff that have worked on the USS Lead Superfund site prior to 2016, back until 1985 if possible, and are still currently working at EPA.

<u>A:</u> Submitted a list of EPA employees who charged time to the USS Lead project prior to 2016 and are still working at EPA (list was an attachment-Source 9).

Q: Confirm that no one else on this list, other than those identified, were ever an OSC or RPM at the USS Lead site.

<u>A</u>: There are some that are currently OSC/RPM's, but given the timeframe or worked/billed hours, she is not aware if they were an OSC/RPM at that time for the site. Titles were pulled from records. Main OSC prior to 2016 has retired and left the agency.

Source 9:

List of EPA employees who charged time to the USS Lead project prior to 2016 and are still working at EPA

From: Fischer, Timothy

Sent: Tuesday, April 9, 2019 5:55 PM **To:** Borries, Samuel; Collier, Morgan

Cc: Trynosky, Jill; Levy, Eric

Subject: RE: OIG Risk Communication Emergency Response Site Selection-Information needed on USS Lead

East Chicago Site

Hi Morgan,

The remedial staff who I think you should start with are:

Tom Alcamo – RPM
Sarah Rolfes – RPM
Katherine Thomas – RPM
Tim Drexler – RPM (Retired)
Janet Pope – Community Involvement Coordinator
Charles Rodriguez - Community Involvement Coordinator

Let me know if you need further information for now.

Thanks! Tim

Timothy J. Fischer, Acting Chief Remedial Response Branch 1 Superfund Division U.S. EPA Region 5 312-(b) (6)



From: Borries, Samuel

Sent: Tuesday, April 09, 2019 4:33 PM

To: Collier, Morgan <collier.morgan@epa.gov>

Cc: Trynosky, Jill <Trynosky.Jill@epa.gov>; Levy, Eric <levy.eric@epa.gov>; Fischer, Timothy <Fischer.Timothy@epa.gov> **Subject:** RE: OIG Risk Communication Emergency Response Site Selection-Information needed on USS Lead East Chicago Site

Hi Morgan,

I am not sure who all of the RPMs are that worked on USS Lead. I would recommend you reach out to Tim Fischer for assistance. His email is fischer.timothy@epa.gov and phone number is (b) (6)

Sam Borries Chief, Emergency Response Branch 2 USEPA Region 5, Superfund Division

Office: 312-353-8360 Mobile: 3(b) (6)

From: Collier, Morgan

Sent: Tuesday, April 9, 2019 12:45 PM

To: Borries, Samuel < borries.samuel@epa.gov >

Cc: Trynosky, Jill <Trynosky.Jill@epa.gov>; Levy, Eric <levy.eric@epa.gov>

Subject: RE: OIG Risk Communication Emergency Response Site Selection-Information needed on USS Lead East Chicago

Site

Good afternoon Sam,

Thank you again for providing me with the list of contacts for the removal response staff working at the **USS Lead/East Chicago site.**

I would like to set up a meeting with the remedial staff as well for this site. Could you provide me with a list of remedial staff that would be best to contact?

Thank you for your assistance, Morgan Collier

Morgaw Collier | Program Analyst
Office of Audit and Evaluation
U.S. EPA, Office of Inspector General
WJC Building West | Room (b) (6)
1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460
(202)566-1136 | collier.morgan@epa.gov

From: Borries, Samuel

Sent: Wednesday, March 27, 2019 1:00 PM

To: Collier, Morgan <<u>collier.morgan@epa.gov</u>>; El-Zein, Jason <<u>el-zein.jason@epa.gov</u>>

Cc: Lovingood, Christina <Lovingood.Tina@epa.gov>; Trynosky, Jill <Trynosky.Jill@epa.gov>; Levy, Eric

< <u>levy.eric@epa.gov</u>>; Fusinski, Keith < <u>fusinski.keith@epa.gov</u>>; Mitchell, James < <u>mitchell.james@epa.gov</u>>; Benning,

Brad < benning.bradley@epa.gov >; Hassan, Jacob < hassan.jacob@epa.gov >; Haag, Daniel < Haag.Daniel@epa.gov >;

Miller, Kristina <miller.kristina@epa.gov>

Subject: RE: OIG Risk Communication Emergency Response Site Selection-Information needed on USS Lead East Chicago Site

Hi Morgan,

The OSCs and risk assessors you would want to start your conversation with would be:

Keith Fusinski – Health Risk Assessor Jim Mitchell – OSC Brad Benning – OSC Jacob Hassan – OSC Dan Haag – OSC Kristina Miller– OSC There may be others but I would start with these individuals first.

Sam Borries Chief, Emergency Response Branch 2 USEPA Region 5, Superfund Division

Office: 312-353-8360 Mobile: (b) (6)

From: Collier, Morgan

Sent: Wednesday, March 27, 2019 10:45 AM

To: El-Zein, Jason <el-zein.jason@epa.gov>; Borries, Samuel

borries.samuel@epa.gov>

Cc: Lovingood, Christina <Lovingood.Tina@epa.gov>; Trynosky, Jill <Trynosky.Jill@epa.gov>; Levy, Eric

<levy.eric@epa.gov>

Subject: OIG Risk Communication Emergency Response Site Selection-Information needed on USS Lead East Chicago Site

Good Morning.

For the OIG's assignment on, EPA Communication of Human Health Risks Posed by Sites in the Office of Land and Emergency Management's Programs (OA&E-FY19-0031), we've made an initial selection to look at the EPA-suggested site: USS Lead/East Chicago in Region 5.

We plan to look at available documents and speak with regional site contacts before determining whether we will go on a site visit.

I'd like to set up a conference call with those who work on the site next week.

If one of you could let me know who the best point of contact for the site would be and whether I have included the right people on this email, I would appreciate it.

Thank you in advance for your help and please let me know if you have any questions or concerns.

Thank you, Morgan Collier

Morgan Collier | Program Analyst
Office of Audit and Evaluation
U.S. EPA, Office of Inspector General
WJC Building West | Room (5) (6)
1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460
(202)566-1136 | collier.morgan@epa.gov

From: Mitchell, James

Sent: Monday, April 15, 2019 11:18 AM

To: Collier, Morgan

Cc: Trynosky, Jill; Levy, Eric

Subject: RE: EPA OIG Follow-up on Doc Request for USS Lead/East Chicago Site

Morgan,

Dr. Mark Johnson with ATSDR was our primary contact with ATSDR and the main interface with local and State Health Department on risk communication with the East Chicago Residents. His phone number is 312(b)(6) He does work out of the Chicago office.

Jim...

From: Collier, Morgan

Sent: Tuesday, April 09, 2019 10:15 AM **To:** Mitchell, James <mitchell.james@epa.gov>

Cc: Trynosky, Jill <Trynosky. Jill@epa.gov>; Levy, Eric <levy.eric@epa.gov> **Subject**: EPA OIG Follow-up on Doc Request for USS Lead/East Chicago Site

Thank you again for taking the time to speak with us regarding the USS Lead/East Chicago site last week. To follow-up on our conversation, we would like to request the following documentation for this site, where applicable:

- Web viewer access
- Access to SITREPS
- Possible SharePoint link with the below information, if applicable:
 - Justification and approval for site work, as well as sampling results and/or other health indicators from the site (summary level information)
 - Notices and/or communication documentation with impacted communities for this site such as:
 - Federal register notices/notifications
 - Media articles
 - Brochures/flyers/posters to community
 - Emails/letters/postcards
 - Website postings
 - Public meetings or information session meetings documentation (i.e public meeting minutes and/or agenda)
 - Factsheets provided to the public
 - Copies of slideshow/presentation slides presented to community
 - Other
 - Internal guidance/policies/procedures documents related on risk communication that you used for this site
 - Timeline of site activities (sampling, risk communication, public outreach, etc.)

- Any emergency response or regional guidance/training provided to staff on risk communication techniques at this site
- Evaluations of risk communication efforts/feedback from the communities such as any comments from the community

--In addition to the items listed above could you also please provide: 1) contact information for EPA remedial staff we may want to speak with, 2) public affairs specialist involved at the site, 3) contact information for any consultants used, and 4) contact information for CDC/ATSDR, East Chicago Health Dept, PESHU (Pediatric Environmental Health Specialty Unit) staff involved at this site.

If an item listed above is not applicable for this site, please indicate that in your response. Please let us know if you have any questions.

Thank you again for your time and assistance with our review. It is much appreciated. --Morgan Collier

Morgaw Collier | Program Analyst
Office of Audit and Evaluation
U.S. EPA, Office of Inspector General
WJC Building West | Roon (b) (6)
1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460
(202)566-1136 | collier.morgan@epa.gov

From: Rolfes, Sarah

Sent: Thursday, June 27, 2019 2:08 PM **To:** Trynosky, Jill; Lovingood, Christina

Cc: Collier, Morgan; Dodds, Jennifer; Alcamo, Thomas

Subject: El Worksheet - Tour Follow-up

Attachments: 05-522714.pdf

Christina,

Attached please find the EI worksheet requested during the site tour on Tuesday. I've also copied the RCRA project manager for the DuPont site, Jennifer Dodds, as requested. Please let me know if you need anything else.

Thanks,

Sarah Rolfes Remedial Project Manager Superfund Division USEPA Region 5

Email: <u>rolfes.sarah@epa.gov</u> Phone: 312(b) (6)

From: Rolfes, Sarah

Sent: Tuesday, July 2, 2019 4:23 PM

To: Collier, Morgan

Cc: Trynosky, Jill; Zander, Rachel; Fischer, Timothy

Subject: RE: Change in Lead Dust Standard

Hi Morgan,

The new lead dust standard applies to TSCA lead-based paint abatement activities. Because the interior work at the USS Lead Site does not include the abatement of lead-based paint, there is no impact to EPA's cleanup activities.

Let me know if you need anything else.

Thanks, Sarah

From: Collier, Morgan

Sent: Tuesday, July 02, 2019 7:31 AM

To: Rolfes, Sarah <Rolfes.Sarah@epa.gov>
Cc: Trynosky, Jill <Trynosky.Jill@epa.gov>
Subject: Change in Lead Dust Standard

Good Morning Sarah,

Thanks again for providing our group with a site tour last week. I had a follow-up question, with the new change in lead dust standard, will this impact the EPA's cleanup in East Chicago at the USS Lead Site?

Thanks in advance, Morgan Collier

Morgan Collier | Program Analyst
Office of Audit and Evaluation
U.S. EPA, Office of Inspector General
WJC Building West | Room (b) (6)
1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460
(202)566-1136 | collier.morgan@epa.gov

From: Rolfes, Sarah

Sent: Tuesday, August 6, 2019 2:47 PM

To: Collier, Morgan

Cc: Rodriguez, Charles; Pope, Janet; Trynosky, Jill; Levy, Eric; Adler, Kevin; Fischer, Timothy; Cannon,

Phillippa; Urban, Amanda; Alcamo, Thomas; Hassan, Jacob; Mitchell, James

Subject: RE: OIG Informational Request for the USS Lead/East Chicago Superfund Site

Morgan,

See below for responses in blue. Please let us know if you have any additional questions.

Thanks,

Sarah Rolfes Remedial Project Manager Superfund Division USEPA Region 5

Email: rolfes.sarah@epa.gov Phone: 312-(b) (6)

From: Collier, Morgan < collier.morgan@epa.gov>

Sent: Tuesday, July 30, 2019 11:44 AM

To: Rolfes, Sarah <Rolfes.Sarah@epa.gov>; Rodriguez, Charles <rodriguez.charles@epa.gov>; Pope, Janet

<Pope.Janet@epa.gov>

Cc: Trynosky, Jill <Trynosky.Jill@epa.gov>; Levy, Eric <levy.eric@epa.gov>

Subject: OIG Informational Request for the USS Lead/East Chicago Superfund Site

Good Afternoon,

Below are a few questions the OIG risk communication team would like to ask the site contacts, in regards to environmental justice at the USS Lead/East Chicago Superfund Site.

- Did anyone in your region or OLEM-HQ use the EJ screen tool to analyze the USS Lead/East Chicago Superfund site? Yes, the EJ Screen Tool was utilized in 2016 as part of the Removal Action. EJ analyses were also conducted as a part of the 2011 (EJ SEAT) and 2008 (Environmental Justice Case Criteria for the State of Indiana) removal actions.
- 2. If yes, what was the outcome and how was the information used? The EJ Screenings indicated the USS Lead Superfund Site is located within an EJ Community. The information was used to develop the updated Community Involvement Plan and help CICs plan outreach activities to the community. This included the addition of a Spanish speaking CIC and Spanish Speaking Outreach Materials. The Community Involvement Plan was updated in 2018, due to changes in the community involving Zone 1.
- 3. Was there an EJ analysis completed for the site? Yes an EJ analysis was completed. The EJ analysis was completed as part of the Time Critical Removal Action in 2008, 2011 and in 2016.
- 4. If there was an EJ analysis completed, what was the outcome and how was that information used? See response to Question 2. In addition to those actions, EPA also hosted a Superfund 101 training at the East Chicago

Enterprise Academy, conducted a Superfund Jobs Training Initiative at Carrie Gosch (15 graduated from the program and many were employed at the site or are working on other cleanup sites), awarded a Technical Assistance Grant (TAG) to the East Chicago Calumet Coalition Community Advisory Group (ECCC), hosted many public meetings and open houses, and hosted a Resources for Communities Workshop at the Pastrick Library. The EPA HQ Director of the Office of Environmental Justice visited the site (October 24 and 25, 2017) and had a meeting with local community leaders, including members of ECCC and several other local community groups interested in the site. EPA also conducted additional outreach in the community, which is noted on the community outreach timeline.

Through EPA's Conflict Prevention and Resolution Center, the region asked support contractor Skeo to conduct a situation assessment in March 2017. Its purpose was to better understand the factors impacting community engagement efforts at the USS Lead Superfund site and to explore ways to strengthen and enhance those efforts. As a result of that assessment, EPA hired an independent, neutral facilitator and began a series of monthly community meetings. The meetings were facilitated by the neutral party, had publicly available agendas and welcomed all community stakeholder groups. These meetings included site-related updates, educational materials and speakers on specific topics (such as lead in drinking water) requested by the community, and provided an opportunity for EPA to answer community questions. During conference calls with the facilitator and community involvement coordinator prior to the meetings, representatives of the community groups concerned about the site had an opportunity to identify questions and issues they wanted addressed.

- 5. Did any EJ considerations impact the EPA's sampling events at the site? If so, how? Contractor sampling teams utilized bilingual staff members during sampling. If they were unavailable, EPA staff would provide assistance.
- 6. Did any EJ considerations impact the EPA's communication of human health risks at the site? If so, how? Yes, EPA went door-to-door multiple times with English and Spanish speaking employees to get access for sampling, provide hand out information provided by ATSDR concerning how to minimize exposure, and answer general site questions/concerns. Many open houses have been hosted by EPA, including the following health agencies: Indiana State Department of Health, Great Lakes Center for Children's Environmental Health, East Chicago local health Department, HealthLinc of East Chicago, Agency for Toxic Substances and Disease Registry, Purdue University Extension Nutrition Education Program, Indiana Housing and Community Development Authority, and Sheridan Health Care Services & Community Development Authority. In addition, ATSDR and a pediatrician from the Great Lakes Center for Children's Environmental Health attended and answered questions during several of EPA's public meetings. EPA also handed out flyers to residents containing information on free blood lead testing provided by the City of East Chicago. EPA has and continues to staff an on-site office at the former Carrie Gosch Elementary School (which is open Tuesday-Thursday to the public on a walk-in basis; Monday and Friday are available by appointment). EPA has a dedicated hotline for the public with a local area code. EPA staff answer the phone and respond to messages Monday thru Friday. EPA has also worked with the local health department to set up a blood lead testing lab at the former Carrie Gosch Elementary School during the 2016 Removal Actions. EPA later arranged for a mobile blood lead testing lab and event in 2018 at a community center. In addition to those activities, EPA continues to prepare and distribute site information via newsletters, phone calls, and in-person meetings.

We are requesting a response by **COB on Tuesday, August 6.** Please let me know if you have any questions.

Sincerely, Morgan Collier

Morgaw Collier | Program Analyst Office of Audit and Evaluation U.S. EPA, Office of Inspector General WJC Building West | Room (b) (6) 1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460 (202)566-1136 | collier.morgan@epa.gov

From: Rodriguez, Charles

Sent: Monday, August 19, 2019 2:15 PM

To: Collier, Morgan

Cc: Trynosky, Jill; Levy, Eric; Mulchandani, Roopa

Subject: RE: Question on which EPA staff member attended the OIG's listening session

Hi Morgan,

Karen Kirchner, EPA Remedial Project Manager, attended the session.

Regards,

Charles Rodriguez

Community Involvement Coordinator
U.S. EPA, Region 5, Superfund
77 W. Jackson Blvd., SI-6J | Chicago, IL 60604
(312 6) (6) | rodriguez.charles@epa.gov

From: Collier, Morgan <collier.morgan@epa.gov>

Sent: Monday, August 19, 2019 1:05 PM

To: Rodriguez, Charles < rodriguez.charles@epa.gov>

Cc: Trynosky, Jill <Trynosky.Jill@epa.gov>; Levy, Eric <levy.eric@epa.gov>; Mulchandani, Roopa

<Mulchandani.Roopa@epa.gov>

Subject: Question on which EPA staff member attended the OIG's listening session

Good Afternoon Charles,

It was mentioned to the OIG team that an EPA staff member attended the OIG's East Chicago listening session.

Could you provide me with the name and title of the EPA staff member?

Thank you in advance, Morgan Collier

Morgaw Collier | Program Analyst
Office of Audit and Evaluation
U.S. EPA, Office of Inspector General
WJC Building West | Room(5) (6)
1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460
(202)566-1136 | collier.morgan@epa.gov

From: Pope, Janet

Sent:Friday, February 7, 2020 11:04 AMTo:Collier, Morgan; Trynosky, Jill; Levy, EricCc:Cannon, Phillippa; Rodriguez, Charles

Subject: FW: OIG Follow-up Questions for the USS Lead Superfund Site

Attachments: Colored Copy Information.docx; Walgreens Distribution.pdf; Calumet Days Handouts.pdf; USS Soil

Lead Garden Fact SheetATSDR.pdf; USS Lead Situation Assessment Final 5-3-17.pdf

Hi Morgan please see my responses in red below:

- 1.) When did Charles become a Community Involvement Coordinator at the USS Lead site? Charles became a part of the USS Lead Team in 2014. Before Charles joined the USS Lead team contractor support was provided for the Spanish speaking residents by the contractor or other EPA staff.
- 2.) Is there an official Community Advisory Group (CAG) for the USS Lead site? *No.* If so, what is the name of the group? When did it apply for the CAG designation and when was it recognized as the CAG for the USS Lead Superfund site?
 - EPA does not have a process to officially designate or recognize a group as a Community Advisory Group. At the USS Lead site there are at least three active community groups – the East Chicago Calumet Coalition, Calumet Lives Matter and the Community Strategy Group. One of the groups – the East Chicago Calumet Coalition – self identifies as the CAG for the USS Lead Superfund site. However, members of the other groups have written to and told EPA that the East Chicago Calumet Coalition does not represent them. EPA, a neutral facilitator and an elected official from the area consistently encouraged the groups to come together, but they did not choose to do so. EPA treats each of the groups equally and does not interact with any single group as exclusively. A situation assessment carried out by SKEO, a mediation and facilitation services consultant contracted through EPA's Conflict Prevention and Resolution Center, identified a significant level of conflict among the leaders of the groups and noted "it seems unlikely that existing community groups would reconstitute themselves as a single community entity for the purpose of engaging with EPA." The situation assessment recommended engaging a neutral facilitator who would hold a meeting with the leadership of community groups to introduce the EPA monthly community meeting concept and solicit input on meeting format and priority educational topics. "Community leaders would be reassured that all groups would be treated equally at well-facilitated meetings and that all groups would have an opportunity to submit questions to EPA in advance to inform the development of monthly meeting agendas." That is the approach EPA followed.
- 3.) Questions on the USS Lead Superfund Site Community Involvement Timeline Activities (2006-Present):
 a. In July 2010 it mentions that EPA participated in Calumet Days and distributed lead-prevention information.
 Could you provide us with the information that was distributed? See Attached
 b. In October 2011 it mentions that there were color-coded pages explaining the results and levels of contamination. Could you provide us with a copy of this? See attached
 c. In August 2013 it mentions that there were gardening and other information handouts distributed at local Walgreens, Riley Park, and the MLK Center. Could you provide us with a copy of the information that was distributed? See Attached. Did the EPA or another agency or group published this information? ATSDR, Indiana State Department of Public Health, Illinois EPA published some of these materials.

Let me know if you need additional information.

Janet L. Pope

From: Collier, Morgan < collier.morgan@epa.gov > Sent: Wednesday, February 05, 2020 9:46 AM

To: Pope, Janet <Pope.Janet@epa.gov>; Rodriguez, Charles <rodriguez.charles@epa.gov>

Cc: Trynosky, Jill < Trynosky. Jill @epa.gov >; Levy, Eric < levy.eric@epa.gov >

Subject: OIG Follow-up Questions for the USS Lead Superfund Site

Good Morning Charles and Janet,

The OIG team has a few follow-up questions related to the USS Lead Superfund site and the risk communication audit listed below.

- 1.) When did Charles become a Community Involvement Coordinator at the USS Lead site?
- 2.) Is there an official Community Advisory Group (CAG) for the USS Lead site? If so, what is the name of the group? When did it apply for the CAG designation and when was it recognized as the CAG for the USS Lead Superfund site?
- 3.) Questions on the USS Lead Superfund Site Community Involvement Timeline Activities (2006-Present):
 - a. In July 2010 it mentions that EPA participated in Calumet Days and distributed lead-prevention information. Could you provide us with the information that was distributed?
 - b. In October 2011 it mentions that there were color-coded pages explaining the results and levels of contamination. Could you provide us with a copy of this?
 - c. In August 2013 it mentions that there were gardening and other information handouts distributed at local Walgreens, Riley Park, and the MLK Center. Could you provide us with a copy of the information that was distributed? Did the EPA or another agency or group published this information?

Thank you for your continued assistance. Please reach out to me if you have any questions.

Sincerely, Morgan Collier

Morgaw Collier | Program Analyst
Office of Audit and Evaluation
U.S. EPA, Office of Inspector General
WJC Building West | Room
(b) (6)
1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460
(202)566-1136 | collier.morgan@epa.gov

From: Rolfes, Sarah

Sent: Wednesday, March 11, 2020 10:18 AM

To: Collier, Morgan; Pope, Janet; Levy, Eric; Trynosky, Jill **Cc:** Adler, Kevin; Kaiser, Steven; Fischer, Timothy

Subject: RE: OIG Information Request-USS Lead Superfund Site

Morgan,

There are individuals on that list that are OSCs and RPMs currently. However, given the timeframe of the work/billed hours I am not aware if they were an OSC/RPM at that time on this site. Their titles were all pulled from the time records, with the exception of the main RPM who was assigned to the site prior to 2016 (Michael Berkoff, who is identified as RPM on the list). The main OSC who was assigned to the site prior to 2016 has retired and left the agency and is not identified on this list.

Please let us know any additional questions.

Thanks, Sarah

From: Collier, Morgan <collier.morgan@epa.gov>

Sent: Wednesday, March 11, 2020 9:00 AM

To: Rolfes, Sarah <Rolfes.Sarah@epa.gov>; Pope, Janet <Pope.Janet@epa.gov>; Levy, Eric <levy.eric@epa.gov>;

Trynosky, Jill < Trynosky. Jill@epa.gov>

Cc: Adler, Kevin <adler.kevin@epa.gov>; Kaiser, Steven <kaiser.steven@epa.gov>; Fischer, Timothy

<Fischer.Timothy@epa.gov>

Subject: RE: OIG Information Request-USS Lead Superfund Site

Good Morning Sarah,

Thank you for providing us with this list.

I just want to confirm that no one else on this list, other than those identified, were ever an OSC or RPM at the USS Lead site.

Thank you in advance,

Morgan

From: Rolfes, Sarah < Rolfes.Sarah@epa.gov > Sent: Wednesday, March 11, 2020 9:23 AM

To: Collier, Morgan <<u>collier.morgan@epa.gov</u>>; Pope, Janet <<u>Pope.Janet@epa.gov</u>>; Levy, Eric <<u>levy.eric@epa.gov</u>>;

Trynosky, Jill <Trynosky.Jill@epa.gov>

Cc: Adler, Kevin <adler.kevin@epa.gov>; Kaiser, Steven <kaiser.steven@epa.gov>; Fischer, Timothy

<Fischer.Timothy@epa.gov>

Subject: RE: OIG Information Request-USS Lead Superfund Site

Good morning Morgan,

Attached please find the list of EPA employees who charged time to the USS Lead project prior to 2016 and are still working at EPA. Please let us know if you have any questions.

Thanks, Sarah

From: Collier, Morgan < collier.morgan@epa.gov>

Sent: Wednesday, March 04, 2020 2:19 PM

To: Pope, Janet < Pope.Janet@epa.gov >; Rolfes, Sarah < Rolfes.Sarah@epa.gov >; Levy, Eric < levy.eric@epa.gov >;

Trynosky, Jill < Trynosky. Jill@epa.gov>

Subject: OIG Information Request-USS Lead Superfund Site

Good Afternoon Janet and Sarah,

Could you please provide us with the names and titles of any Region 5 staff that have worked on the USS Lead Superfund site prior to 2016, back until 1985 if possible, and are still currently working at EPA.

Thank you in advance, Morgan Collier

Morgaw Collier | Program Analyst
Office of Audit and Evaluation
U.S. EPA, Office of Inspector General
WJC Building West | Room (b) (6)
1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460
(202)566-1136 | collier.morgan@epa.gov

7.24.19 USS Lead/East Chicago Superfund Site Region 6 Briefing

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Bo Park	7/29/19	
Reviewed by: Roopa Mulchandani	8/19/19 10/1/19	[]: I reviewed this WP and found it satisfactory. (No comments were provided.) [X]: I reviewed this WP and found it satisfactory. I also included comments in a blue colored font. Please complete the attendees table with titles/phone # [X]: All comments have been resolved.
Edited by: Bo Park	9/5/19	Addressed blue comment above

<u>Purpose</u>: For the OIG team to brief Region 5 staff and managers on the USS Lead/East Chicago listening session held on June 26, 2019, and to discuss areas of concern and questions resulting from the OIG team's site visit.

Project Guide Step #: 44b, 45

Source(s):

Meeting/Interview Information:

Date & Time/Duration	Meeting Location
July 24, 2019 12:30-1:30pm	Call-in number 202-991-044, conference ID (b) (6)

Participants:

#	Name	Title/Organization	Contact Information
1	Jill Trynosky	EPA OIG Project Manager	²⁰² (b) (6)
2	Tina Lovingood	EPA OIG Director	202
3	Kevin Christensen	EPA OIG A&E AIG	202
4	Bo Park	EPA OIG Program Analyst	215
5	Alisha Chugh	EPA OIG Program Analyst	202
6	Roopa Mulchandani	EPA OIG Program Analyst	415
7	Morgan Collier	EPA OIG Program Analyst	202
8	Allison Krenzien	EPA OIG Program Analyst	303
9	Seth Gerhart	EPA OIG Program Analyst	202
10	Julie Narimatsu	EPA OIG Program Analyst	312
11	Janet Pope	R5 CIC	312
12	Charles Rodriguez	R5 CIC	312
13	Kevin Adler	R5 Section Chief	312
14	Amanda Urban	R5 Attorney	312
15	Phillippa Cannon	R5 Section Chief	312
16	Jeff Kelley	R5 EOC Director	312
17	Jackie Harwood	OLEM Program Analyst	202
18	Nancy Grantham	AO-OPA PRINCIPAL DEPUTY ASSOCIATE ADMINISTRATOR	202
19	Kurt Thiede	R5 Chief of Staff	312
20	Eric Levy	R5 Accountant	312
21	Carolyn Levine	AO Supervisory Program Analyst	202
22	Jessica McFaul	AO OPA	202
23	Tim Fischer	R5 Branch Chief	312
24	Thomas Alcamo	R5 Chemical Engineer	312
25	Katherine Thomas	R5 RPM	312
26	Thomas Short	R5 Deputy Director	312
27	Doug Ballotti	R5 Director	312
28	Jacob Hassan	R5 OSC	312
29	Daniel Haag	R5 OSC	312

30	Cathleen Martwick	R5 Attorney	312 (b) (6)
31	James Mitchell	R5 Physical Scientist (Environmental)	312
32	Doug Benevento	R8 RA	202
33	Corry Schiermeyer	AO-OPA	202 (b) (6)
34	Karen Kirchner	R5 Physical Scientist (Environmental)	312
35	Nelson Leverett	R5 Regional Counsel	312
36	Andrea Drinkard	AO-OPA – Public Affairs Specialist	202
37	Craig Thomas	R5 Acting Section Chief	312
38	Rachel Bassler	R5 Public Affairs Specialist	312
39	Jason El-Zein	R5 Branch Chief	734
40	Leslie Patterson	R5 Physical Scientist (Environmental)	312
41	Marcy Toney	R5 Section Chief	312
42	Sarah Rolfes	R5 RPM	312
43	??? Brown		

Scope: Link: Link: INDEX

The briefing took place via a teleconference call on July 24, 2019 from 12:30pm to 1:30pm. OIG shared information on 6 general topic areas gathered from the USS Lead/East Chicago community listening session.

Conclusion(s):

- 1. OIG shared community feedback to Region 5 staff from USS Lead/East Chicago listening session [Details 6] in order for EPA to make any changes as appropriate in a more timely manner [Details 9]
- 2. OIG shared 6 general topics areas: 1. EPA communication (general) 2. EPA communication (specific to residents and local leaders) 3. Comments on EPA's site work 4. Comments on site work or communication by PRPs or any external groups 5. overall contamination concerns and impact on local area 6. additional areas of feedback not covered by sections above [Details 16-21]
- 3. OIG offered individual meetings to answer any follow up questions region may have; region stated that would be helpful as the site is complex and context is important [Details 24]
- 4. EPA used Community Involvement Plan to interview residents with 20-35 questions and according to the answers, the information requested in included in the newsletter [Details 25]
- 5. EPA is currently in the process of responding to comments because there are many and the government shutdown extended the public comment period from 60 to 120 days [Details 32]
- 6. EPA has a process to take comments from public, get them to the right person, make sure it's responded to [Details 39]; uses database/sharepoint to collect comments and will be shared with OIG [Details 37, 41]
- 7. EPA will provide OIG with declaration prepared in context of litigation, that CIC gave in 2016, that addressed the beginning of Superfund's involvement [Details 28-29]
- 8. EPA has pre-conference call to collect questions before public meeting so people who can answer them will be available at public meeting [Details 44]
- 9. Oil brown substance in resident's homes related to poor ventilation in home (mold) and shared this information with public already [Details 48]

- 10. Challenge for EPA: disagreement of response from EPA to public, questions arising time and time again [Details 50]
- 11. Although comments may be public's perception, it still reflects how EPA is doing and that is up to the region to solve [Details 54]
- 12. Zones at site broke out naturally due to geography, source of contamination, contamination [Details 56]; because of that, there are different PRPs associated with zones [Details 57]
- 13. EPA had to delay zone 1 remediation despite being on the verge of starting due to public housing complex being demolished per mayor's request [Detail 59]
- 14. Other issues include trying to get access to property for sampling and remediation; EPA is in court right now to gain access [Detail 60]

Details of the Meeting/Interview:

- 1. Jill: welcome and overview; stated project objective and scope (8 in-depth site reviews), listening session overview and OIG procedures
- 2. Roll call of EPA OIG and Region 5 staff.
- 3. Kurt began by asking if OIG can share who said what with names when OIG met with others in the community outside of the community listening session.
- 4. Jill: We asked who the main contacts for IDEM were and any city officials when we were planning the site visit. In terms of giving exact names, I don't think we can do that right now.
- 5. Kurt: for today's briefing, are you planning to cover feedback from those individuals as well?
- 6. Jill: focus for today is in large part feedback from listening session
- 7. Kurt: in regards for R5 staff, will we have opportunity to respond?
- 8. Jill: we built in time at the end for that, if we don't get to that, we will set up another meeting.
- 9. Tina: point of sharing community feedback is for R5 to make any changes as appropriate (immediate feedback) for next public mtg
- 10. Kurt: final comment- I know OIG spent some time looking at materials to date (past decade), what we're hearing from community is what we're covering.. whether your comments today cover activities covered by EPA already in East Chicago
- 11. Jill: we reviewed many of the documents and we are aware of that. Again, today we're talking about perspective of community: timeliness and clarity of the notification. Although there may have been a lot of communication that have taken place, we'll be talking about what community still had concerns about. We are aware there are a lot of activities going on, but also listening to what the community has to say about the type of communication public has received
- 12. Doug: as Morgan goes through this, do you want us to indicate if there is anything factually incorrect?
- 13. Jill: wait until the end to say those points
- 14. Tina: a lot of this their opinion rather than fact- keep that in mind
- 15. Morgan discussed 6 general topic areas below
 - a. Talking points with region 5 USS Lead/East Chicago staff community perspectives the OIG heard

16. #1 EPA Communication - General

- a. There are various EPA staff involved in communication with the public: OSC, RPM, CIC
 - i. Various methods used, including: emails, newsletters, events, meetings, workshops, fairs, blood testing, newspaper, mailing list, community groups, web page, etc.
 - ii. EPA measures effectiveness of communication from verbal responses from the community or by measuring public participation
- b. Housing complex closing in Zone 1 was very difficult for residents. Hard for residents to fully understand all of the factors that led to this decision. Demolition of the housing units was not an EPA decision.

17. #2 EPA Communication - Specific to Residents and Local Leaders

a. Community members believe there has been a legacy of miscommunication about the site. EPA has known about the site since 1985 and it wasn't until the last few years that it is being addressed and is being addressed in such a way as to create distrust in the community and has caused the loss of EPA credibility. Link: INDEX

b. Further details on the EPA's lack of communication:

- i. 1) Notifying residents-
 - 1. It was unclear, even from the EPA on when the contamination risk was identified.
 - 2. Residents believe they have to protest to be heard.
 - 3. Some feel communication didn't occur for 27 years, some feel there was a delay in communication for 17 years, some feel EPA knew since 1985. Link: INDEX
 - 4. At the 2009 meeting, people felt the risks were downplayed
 - 5. Sampling done in November 2014, took 18 months to notify residents about the risks because data were not finalized
 - 6. Some felt there were interagency disagreements and a lack of full coordination and cooperation between agencies (federal, state and local) on who was doing what with the lead issue
 - 7. Because EPA negotiated with the PRPs by zone, and zone 1 which the community perceives was the worst was negotiated last, EPA created a lot of distrust and lost a lot of credibility. Link: INDEX
 - 8. The public said that they didn't know about the lead issues until the mayor told them, and that EPA gave the mayor the results and did not provide them to the public.
 - 9. According to residents, there were warning signs about lead contamination put up in zone 1, but not in zone 2 or 3
 - 10. In 2016, the public feels EPA continued to downplay risk
 - 11. In 2018, the public continued to feel that the EPA presentations were lacking transparency <u>Link:</u> <u>INDEX</u>
 - 12. Some members of the public feel that there is not enough notice given ahead of public meetings
- ii. 2) Educating the community on lead testing and next steps-
 - 1. Some residents don't understand the decisions made at the site and felt there was not clear communication on the sequence of events and next steps
 - 2. Residents feel that some EPA documents and the site webpage are too technical, and not bilingual
 - 3. Many people we spoke with did not understand what is going on with zone 1 (believe the mayor wants it cleaned up to residential standards, but EPA won't, who is the decision maker? -need clarity on this issue)
- iii. 3) Providing the community with options on what to do as a result of the contamination.
 - 1. Residents we talked with said there was no plan for where families were to be relocated (zone 1)
 - 2. Community members have concerns that there is no tracking of who is coming in and out of the community
 - 3. In addition, the community wants a registry to track those who have been exposed
- c. Many people we have spoken with have voiced that there is a lack of trust in EPA because of concerns over EPA's credibility and integrity based on perceptions that EPA had information on severe levels of contamination and did not immediately share with those in danger.
- d. One comment from a concerned citizen was that "EPA has done more damage than they have helped"
- e. Others we have spoken with feel that there is structure of oppression that is being continued
- f. Some concerns on who from the community gets invited to speak at stakeholder meetings, some feel politics are involved
- g. There is frustration amongst those we spoke with. Many believe the EPA needs to listen to and take the community seriously as people have to live here, "why ask if you're going to do nothing?"

- h. The community believes it is due additional communication and benefits because of the impacts from the multiple sites around them.
- i. There are many agencies involved and the residents have found this very confusing
- j. Residents want to be invited to the table when decisions are made about the site
- k. The panel discussions were seen as beneficial and residents preferred that method of meeting. Some are very happy with the CIC's working at the site, feel they have good intentions and want to help

18. #3 Comments on EPA's Site Work – especially related to sampling, communication of and actions resulting from residential test results

- a. Some feel that region 5 CIC and EPA staff on-scene have done a really great job, but are not happy with management decisions and EPA in general
- b. There is an overall impression of EPA as an agency as not being diverse.
- c. Residents are concerned that there is no disclosure that homes are located on a superfund site by EPA or in paperwork. Some believe that EPA should go to the real estate association and disclose the existence of a site. Some believe there should also be a disclosure requirement like there is for lead-based paint when someone is buying or selling a home. There are concerns for long-term residents as well as those new to the area not being informed.
- d. Concerns that the site design relied on a failed health study.
- e. Residents voiced that they have questioned EPA on technical aspects of the cleanup and have not received responses from staff. Some residents believed that EPA was making cleanup decisions without a full risk assessment and that certain chemicals like PCB/Dioxin were not studied. Air deposition studies were done but the results were never communicated to the public (or the public were not aware of results). One person who indicated he had technical knowledge believed EPA had not used proper background levels in its studies.
- f. People are confused on the sampling method; some think they are missing hotspots because EPA is mixing samples and using composite sampling methods Link: INDEX
- g. People didn't know EPA sampled their yards until 2015-2016, then they started hearing about "resampling", and they never saw the results <u>Link: INDEX</u>
- h. Residents questioned why EPA was cleaning up empty lots before lots that were occupied
- i. Some in the community believe that the blood testing has not been made convenient to the residents, and that there is a general distrust with what the city says in regards to the blood test results.
- j. Some feel that here is little to no information and/or screening on arsenic
- k. Homeowners do not understand why there is lead dust inside their homes and have not received a satisfactory explanation from the EPA

19. #4 Comments on Site Work or Communication by PRPs or Any External Groups in the Area

- a. The communities feel their voice is the weakest and the PRP's is the loudest
- b. Some are happy with the result of new yards, say they are looking good.
- c. Others say the top of the yard looks nice, but what is going on underneath? Residents expressed concerns on the quality and type of fill used. There were reports of drainage issues and flooded basements after the remediation.

20. #5 Overall Contamination Concerns and Impact on Local Area

- a. Residents are very concerned about the birth defects, cancer, and behavioral issues that are occuring in the area, and they think it is from the site. In addition, they are worried for the next generation.
- b. Confusion about why blood lead testing is limited to children when exposure has occurred for so many years.
- c. Concerns that groundwater from Lake Michigan will bring contaminants back into the area
- d. There are concerns about the water flooding homeowners' basements and that EPA is not testing this water for contaminants. They didn't talk about the risk with the homeowner and the water coming into homes looks unsafe.
- e. Community members are very concerned about the re-population of the community
- f. Some residents feel that the land cleanup is being driven by just land-use

- g. People are still confused about the difference between the Superfund site and the RCRA Dupont site
- h. There are concerns that the combined effects of contaminants from both sites aren't being shared with the community. Link: INDEX

21. #6 Additional Areas of Feedback Not Covered by Sections Above

- a. Active community with multiple CAGs. On some issues both remediation and preferred communication, the CAGs are not in full agreement on desired outcome.
- b. Observation about this site is that there appear to be some "outsiders" (those who don't live near the site) driving some criticism of the EPA and cleanup, but overall there were more that do live near the site who have risen up to comment on/protest about the site(s).
- 22. Jill: Based on what we heard, we had some questions we wanted to follow up with the region. Some may lend itself better to have individual meetings. Methods of communication used at site and at what time... how is that determined by EPA? Use of newsletters and what info goes in it. Want to talk about different zones. Identifying stakeholders and community members. Timeline for site and when risk was discovered and when EPA covered and EPA not disclosing harmful risk to residents. Residential yards.. what people are provided (info post remediation). Removal vs remedial team. How EPA is responding to comments and questions received at site. Multiple community members felt their comments were not being answered. Also EPA's role in assessing communicating overall human health impacts esp. for high blood test level results.
- 23. Tina: 1 more question-getting clarity on who you are required to provide risk information to? We can also set up separate meetings.
- 24. Doug? Or Kurt?- lot of questions... to do them justice, follow separate meetings would be really helpful. Lot of them are complex and context is really important to answer questions appropriately. CIC folks, anything you'd like to respond to in terms of newsletters. We shared a lot of work that was shared with IG already.
- 25. Janet: how to communicate residents, we use CIP. We did series of interviews and we asked them what they wanted to know and how often. 20-35 questions. Updated CIP last year. Bunch of calls with concerns in the newsletter, every question we get from them, we put who to call for what info (lead testing) so we provide all that info in the newsletter.
- 26. Charles: we also add milestones that are relevant (in newsletter) and progress on site like figures and numbers. Properties cleaned up.
- 27. Janet: we also let them know Spanish speaking CIC onboard. Then they'll call Charles. We give them opportunity to let us know if they need more info in newsletter and we'll put that info in there
- 28. ?: We put declaration that Janet gave in 2016 that went to beginning of Superfund's involvement. 2009 NPL listing. May be beneficial for OIG to look at that declaration to see community involvement up to that point.
- 29. Laywer Ret? declaration was prepared in context of litigation. It's from Janet. Providing context and timeline may particularly be useful. Follow up meetings … having that document would be helpful and we'd like to submit that to you if we can.
- 30. Jill: sure
- 31. Man: we haven't responded to peoples comments? Part of remedy selection over to Thomas
- 32. Zone 1 Thomas RPM: zone 1 was closed by mayor, mayor and state funded demolition. Had to look at remedy for zone 1. 30 day public comment period extended to 60. Govt shutdown .. 120 days extended. Responsive summary attached to remedy document-currently in the works be lots of comments. We're in process of responding to comments.
- 33. Jill: in addition to formal comments on remedy selection, ppl talking about Qs and comments about site work and health info in general and sampling.
- 34. Man: comments made given context? Where/when?

- 35. Jill: mix of diff forums. Public meetings, emails, calls, variety of diff situations where people feel they didn't get answers to comments/questions. It's public perception that public is not getting Qs answers so we're trying to understand EPA's way of answering public Qs /comments
- 36. Tina: after public mtg, resident said EPA didn't respond to his comment independent comment not during public comment period(example)
- 37. Janet: often we receive comments via hotline, stopping us in the street, door to door, at schools, emails, everybody's comments is responded to. Web page where they can submit to us. Comment goes to Sharepoint & within 24 hours usually respond. We f/u with each other and community will tell us they were responded to. Come in a variety of ways to us and we make sure we respond.
- 38. ?: U have a process to do that right? Janet: yes
- 39. Man: I made a comment, I didn't get a response. Sounds like region has process to intake comments and to get them to right person and make sure its responded to. Region has process? Janet: right
- 40. Charles: sometimes public mtgs, we don't have answers right away but we'll get contact info and get back to them
- 41. ?: we can make that database available to IG
- 42. Tina: that would be helpful
- 43. ?: at the height of removal actions, there were a lot of technical questions including sample and methodology, we would answer questions there. Ppl who can answer technical questions. Often we would hear same questions at multiple meetings. They didn't necessarily like the answers. Its important that at public mtgs, we bring experts on variety of issues out there to be able to answer those questions in real time. But if we can't at the time, we get the answers and respond ASAP
- 44. Janet: pre-conference call questions get questions beforehand to make sure ppl avail to answer those questions. Did that 1x per month. Then at public mtg, give all the answers to questions.
- 45. ?: GW and water in basements... important to understand that cleanup going on now is in 2 operable units. We have answered at public mtgs and availability sessions.
- 46. Yes that investigation is still ongoing and we've addressed this concerns w/ public by door to door. We discussed preliminary results. We are still seeing if its attributed by plume at the site. Residents have been unhappy w that answer. Could be separate issue
- 47. Tina; not just GW but oily, brown substances that appear to coming into their basement as well
- 48. ?-removal team looked at that and OSC: public mtg: that oil brown substance mentioned. We investigated further w/ IDEM and city thru sampling event in 1 home in particular. We also did drinking water sampling and had those results looked at by ATSDR and IDEM. Essentially, issue related to poor ventilation in the home (mold). Shared that with public and will put that on our website. We took those concerns to heart and investigated further.
- 49. Jill: that's helpful information to know. At the beginning, Kurt, any factual inaccuracies, you mentioned, want to share any now.
- 50. Kurt?: # of issues raised where perception not receiving a response. Disagreement of response or receipt of response given. How do we navigate Qs that have been addressed but coming up again. I'm trying to determine how to navigate that.
- 51. Jill: discussed Sharepoint file tracking comments, having further f/u meetings with regional staff, anything from what we talked about that would be factually inaccurate that u want to raise during this call?
- 52. ?:what u raised is raw data. Not factual issue. Sounds like exclusively from listening session that is subset of community. Region may want to contemplate raw data. You don't view this as fact, do you? We want to evaluate this as raw data that you put on the table today. Is that fair?
- 53. Jill: it's the perspective of community members and how they are receiving from EPA and what they're taking away. Other piece of that is what EPA has done.

- 54. Tina: this is their perception. Not sure if repeated comments. Not sure if they don't feel heard, EPA hasn't gotten through, don't agree. They certainly did have these feelings and questions. One of the ways we try to conduct audit is to corroborate with EPA documentation (e.g. q&a database and declaration). But their comments still reflect whether EPA is getting through. I think that's up for the region to solve. We may also provide feedback as we gather recommendations from other sites where similar issues have come up
- 55. Doug: anything staff heard that they would like to provide clarification to based on their personal experience?
- 56. Martha: zones broke out naturally in a way due to geography and what we knew about contamination and sources. Zone 1: public housing on west side on footprint of former smelter. Zone 2, 3: relied more on idea of air deposition. Zone 2 was demarked largely neighborhood identity. Abandoned/lower income properties. Zone 3: closer to dupont facility and more residential property.
- 57. ?: b/c of that, different PRPs associated with zones. Therefore you saw consent decrees that showed work needed to be done at 1 and 3 and not 2. Rationale for PRP to do what when, looked at legal history. We can outline that for you
- 58. Zone 2- used removal authority. Same for zone 3. Started fall of 2016.
- 59. Why zone 1 started last? we had agreement to address zone 1 in beginning. On the verge of starting but mayor decided to shut down public housing complex and demolish so we could not proceed with remedy in zone 1. We tried to explain but may have been misunderstanding. We had public meetings and availability sessions. Link: INDEX
- 60. It's complicated stuff. There's hundreds of residents involved. Issues of access to complicate our ability to do necessary sampling and remediation. We are in court right now still trying to access property.
- 61. I would be interested in recommendations from OIG from RC standpoint in future at R5.
- 62. Jill: thank you. We will be in touch to set up follow up meeting. We are analyzing information at all sites and we do anticipate having RC recommendations to EPA. Estimating final report 5-6 months. Draft report will also be provided prior to final report.
- 63. Rett: Janet's declaration, IG access to comments action steps. Will send to Jill and Jill share with team
- 64. Tina: thank you for R5 for receiving information and you have been very professional to your response to us and we will certainly do our best to provide recommendations
- 65. Kurt: return the thanks and look forward to f/u of meetings and any improvement of communication efforts at complicated sites like this.

Meeting adjourned

WP Subject Line: 6/27/19 East Chicago USS Lead IDEM Interview

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Seth M. Gerhart	7/16/19	
Reviewed by: Jill Trynosky	8/9/19	[x]: I reviewed this WP and found it satisfactory. (No comments were provided.) []: I reviewed this WP and found it satisfactory. I also included comments in a blue colored font. []: All comments have been resolved. Highlighted some information. No comments to address. This is a very detailed write-up. Thank you.
Edited by:		

<u>Purpose</u>: For the USS Lead site in East Chicago, interview the site's project manager to get their opinions on the current conditions, to determine the cause of any apparent delays or lacking communication and/or answer any other questions that arise.

Project Guide Step #: 42

Source(s):

Meeting/Interview Information:

Date & Time/Duration	Meeting Location	Invitation
6/27/19, 2PM – 3PM	Call-In number 202-991-0477; conference ID (b) (6)	Link: D.17c - [IP] East Chicago IDEM Interview 6.27.19 - FW OIG Audit of EPA Communication of Human Health Risks at the USS LeadEast Ch.ics

#	Name	Title/Organization Contact Informatio	
1	Morgan Collier	Program Analyst/ EPA OIG	202(b) (6)
2	Seth Gerhart	Program Analyst/ EPA OIG	202
3	Allison Krenzien	Program Analyst/ EPA OIG	303
4	Doug Petroff	Project Manager/ IDEM, Federal Programs Section	(b) (6) Didem.in.gov

Scope: This workpaper is designed to document an interview with an IDEM project manager to get their opinions on the current conditions at the USS Lead site in East Chicago, to determine the cause of any apparent delays or lacking communication and/or answer any other questions that arise about this site to answer the objective for this audit assignment [Communication of Human Health Risk at Sites in OLEM Programs OA&E-FY19-0031]. The interview was held on June 27, 2019.

Summary/Conclusions:

- (1) The USS Lead Superfund site is broken into two (2) Operable Units, with Operable Unit 1 broken down further into three (3) Zones. Health risks still exist at the site, particularly in Zone 1. The rationale for breaking up the overall Superfund site was to get the potentially responsible parties to begin the cleanup (Link: Details, para. 61 through 69).
- Human health risks were discovered at the site during the scoring process (as part of the determination for adding the site to the National Priorities List) (<u>Link: Details, para. 12</u>), approximately in the year 2009 (Link: Details, para. 4).
- (3) EPA regularly communicates with IDEM staffers regarding the progress of work at the site and known health risks (<u>Link:</u> Details, para. 14). The Agency also frequently (since 2015) delivers this information to well-attended (<u>Link:</u> Details, para. 39) public meetings in a digestible manner (<u>Link:</u> Details, para 33) at a variety of times, locations, and formats—including presentations and open-house meetings (<u>Link:</u> Details, para. 24).
- (4) There are no guidance documents specifically related to communicating risk at the USS Lead Superfund site (Link: Details, para. 41).
- (5) The primary challenge with communicating risk to the public in a timely is due to the time required for data validation and concerns regarding the release of personally identifiable information (<u>Link:</u> <u>Details, para. 43</u>).
- (6) Doug Petroff did not provide any negative feedback regarding the quality of the EPA's risk communication activities. He believes the Agency's work in this area is adequate and did not offer any suggestions for improvement. (OIG conclusion based on an analysis of the summary information above and the details provided below.)

Details of the Meeting/Interview:

[Note: The transcript provided below paraphrases the interview and is not intended to be interpreted as a direct quote.]

- (1) Morgan Collier (Collier) led/began interview by introducing everyone and stating the project objective and work completed/underway:
 - (a) We are looking at 4 programs (RCRA, OSRTI, UST, OEM), conducting in-depth site reviews at 2 sites per program for a total of 8 sites,
 - (b) We have talked to HQ and regional staff and are now talking to the relevant parties at each of the 8 selected sites, requesting documents, then deciding whether to go on a site visit.
- (2) Doug Petroff (Petroff): I am with the Indiana Department of Environmental Management's (IDEM) Office of Land Quality, Federal Programs Section. The Federal Programs Section is unique in the fact that we deal with federal sites. Link: Link: INDEX We're [the section] the point person to funnel comments through, and we work with the EPA or the Department of Defense

(DOD). My role is a project manager, meaning the USS Lead site is only one of 12 sites to which I am assigned. The EPA is the lead agency and IDEM serves as the support. I funnel documents to our technical support staff to ensure there is only one voice for Agency input.

- Q1. Please provide us with a brief, general background of the site and your roles at the site?
 - (a) What type of samplings have you conducted at the site versus those done by the EPA or other agencies, and how frequently has this sampling been conducted?
 - (b) What were the results of the samplings conducted?
 - (c) Are you involved in the 5-year reviews being conducted at this site, or is that handled primarily by EPA?
 - (d) When were human health risks discovered at the site, if any?
- (3) Collier: Could you talk about the type of samplings you've done at the site and the frequency of the sampling?
- (4) Petroff: My involvement with the USS Lead site has gone back ten (10) years back to 2009 when I joined the Section. That's the year the USS Lead site was listed. I know that IDEM was involved in the sampling as part of the listing process back then, which is typical. Sites go through a scoring process to see if they qualify for the national list. Our role has been entirely as a support agency. We are purely here to support the EPA, and we haven't done any independent investigations.
- (5) Collier: What have those results of sampling indicated?
- (6) Petroff: Um, we haven't done any samplings.
- (7) Collier: I can rephrase the question ... Were you privy to any of the results that the EPA conducted at the USS Lead Site?
- (8) Petroff: Yes, those results were compiled into a report and IDEM had the opportunity to review that document. A contractor performed the sampling on behalf of the EPA, because there was no responsible party at the time. If I remember correctly, those reports were completed in 2012 and IDEM had the opportunity to review and provide feedback on them.
- (9) Collier: Will you be involved with the 5-year reviews that will be conducted at the USS Lead site.
- (10) Petroff: Yes, I will be involved. Typically, the trigger of the review would be the completion of the remediation, so once that happens I'll be going with the EPA's Remedial Project Manager (RPM) to do the review, but it hasn't happened yet.
- (11) Collier: Do you know when human health risks were discovered at the site?
- (12) Petroff: Yes, they were discovered as part of the scoring process. Human risks are an inherent part of the scoring process: Scoring high enough to make the National Priorities List (2008) demonstrates that there are human risks. We [IDEM] recommended that the Site should be added to the list.
- Q2. What types of coordination/communication efforts do you have with EPA regional staff regarding this site, and how frequently?
 - (a) Do you have coordination/communication efforts with any other government agencies or other parties for this site? If so, please describe.

- (b) Do you work with both the RCRA (Dupont) and Superfund program (USS Lead) at this site? If so, how do you communicate issues as they relate to both?
 - (i) How does EJ (environmental justice) policy relate to the Superfund and RCRA programs that impact this community?

[Note: The EJ question was answered in the Q3 section.]

- (13) Collier: What types of coordination or communication do you have with the EPA staff?
- (14) Petroff: For this site, in particular, for the last three (3) years or so, the communication with the EPA's staff has been weekly. There is a weekly call every Thursday, and I participate in that meeting with an EPA attorney. The call also involves the Superfund Group's DOJ and responsible parties. There has been a lot of communication on this site for at least the last three years or so.
- (15) Collier: Could you clarify your role at the USS Lead Site?
- (16) Petroff: My job is to be the eyes and ears for the Agency. I periodically ask management about status updates. I like to visit at least once a month to observe the practices of the remediation crews. It has all been overseen already by EPA staff. They have an office onsite, and they have a lot of contractor oversite as well. I am happy with the quality of work of everyone involved.
- (17) Collier: Switching gears here, do you know of any coordination or communication the EPA has had with any other parties?
- (18) Petroff: Not personally. I know that the [IDEM] Office of Water folks were involved with this site, and they have done some coordination with the City of East Chicago. The City is doing a water line replacement project, and they're coordinating a bit there, though that coordination is separate from the Superfund.
- (19) Collier: So, you haven't worked with State Health Department people?
- (20) Petroff: No, not personally. Janet Pope has asked me ... there is a state group that helped with lead paint abatement efforts. I've been in coordination with them and provided with flyers. I don't have the name of them, I apologize. They're almost a quasi-governmental organization.
- Q3. Who is responsible for communicating potential human health risks from this site to the local, impacted communities?
 - (a) What methods of communication have been used for communicating human health risks from this site to the public, and when did they occur?
 - (b) Were you in attendance/involved when EPA held presentation meetings with the public for this site?
 - (c) Who or what groups are being communicated with about potential human health risks from this site?
 - (d) Have any community interest/action groups been formed for the site?
- (21) Collier: Being so close to the community, how do you communicate issues that come from the public being close to a Superfund or Resource Conservation and Recovery Act (RCRA) site?
- (22) Petroff: There have been a lot of public meetings. There's more robust community involvement, more than I've seen on any project that I've ever been involved with. I've been at several meetings where the EPA personnel have gone to great lengths to try to explain the different timetables that the specific sites are on, the USS Lead Superfund site area broadly, and if

- questions happen to be off topic, the EPA works to redirect the focus of the conversation. They've done a good job.
- (23) Collier: Have there been any changes over time over how the meetings were held?
- Petroff: The change I've seen is that the meetings are much more frequent now. The public meetings in the past were held at milestones. As an example, there was always a meeting for the proposed plan ... or at the beginning of the remedial construction season. But starting in 2015, there has been many more meetings. That has definitely changed. There are two community coordinators that are housed onsite now, so their accessibility is great. There are lots of opportunities to speak with the EPA staff, and they've varied the venue for the meetings and the times, trying to reach out to as many people as possible. They've been very accommodating. Some of the meetings have been presentations, some more open-house type meetings. IDEM has participated at some of the open house ones, and we'll just sit at a table and let people approach us to ask us questions. The presentation meetings we don't participate in, just showing up to let people know that we're there
- (25) Alishia Krenzien (Krenzien): I have a couple follow-up questions ... How much advance notice does the EPA give the public and what are the Agency's methods of notification to the public for these meetings?
- (26) Petroff: I don't' have a good understanding of that answer. There's a website with a lot of info and those meetings are posted in that location. There are mailings as well.
- (27) Krenzien: How much notice have you guys [IDEM] been given?
- (28) Petroff: At least three (3) weeks to a month notice. Some meetings are scheduled further in advance. Some meetings have to be rescheduled. For example, government shutdowns or the threat of government shutdowns may alter the meeting schedule.
- (29) Krenzien: Okay, great thank you for that.
- (30) Collier: I have another follow-up question ... Does the EPA run their presentations by you before they give them to the public?
- (31) Petroff: Yes, not every time, but we do get to see them and have an opportunity to provide feedback. That type of review is not uncommon.
- (32) Collier: Does the topic of conversation ever come up on the "technical use of words" and "targeting your audience". This question is related to when you're reviewing the EPA's presentation.
- (33) Petroff: Yes, that point has come up before. Exactly that ... Knowing the purpose of the meetings and making sure we don't get too deep into the weeds to make sure the public can understand. The EPA does a good job at this task ... Even in fairly hostile settings, and they're very open to feedback.
- (34) Collier: How does the Environmental Justice (EJ) policy relate to the Superfund programs, and is there anything different about this site since it is and EJ site?
- (35) Petroff: I think that's part of the reason why so much attention has been given to this site in terms of involvement and community outreach. Im involved in twelve (12) other sites, and the level of involvement and materials presented on this site are more than anywhere else and EJ is a big part of this reason.
- (36) Collier: Can you highlight a couple of your observations on how the USS Lead site is different from your other sites?

- (37) Petroff: There's a site-specific hotline number that facilitates communication and full-time onsite EPA staff. Both of those are very unique and facilitates communication and availability. The frequency of the public meetings really stands out for this site too.
- (38) Collier: I have a quick follow-up question based on your response ... Do you know the attendance rate for the meetings and how that rate has changed?
- (39) Petroff: The rate has been remarkably consistent. Typically, they go down over time, but that doesn't seem to happen here for this Site. There's a very dedicated core group of folks, and I haven't seen any sort of letup regarding their interest. It's not uncommon to see 40-50 people present at every meeting.
- Q4. Are there any policy/guidance/criteria documents being used by you or the EPA for how to conduct risk communication activities with the community for this site?
- (40) Collier: Are there any policy guidance documents used by IDEM on how to communicate risk at this site?
- (41) Petroff: No, not that I am aware of.
- Q5. Have there been any delays or challenges in communicating potential human health risks to local, impacted communities for this site?
 - (a) If so, what were the contributing causes for these delays or challenges?
 - (b) In your opinion, what things went well in terms of communicating potential human health risks to impacted communities for this site?
- (42) Collier: Have there been any delays in communicated risk?
- (43) Petroff: Early on there were some challenges. There was a reluctance to share draft data with the public and that resulted in some delays. The data validation is important, but it's so involved that the validation itself must be weighed against the speed at which the public gets its information. Another challenge with communicating information to the public is that the Agency is hypersensitive with Personally Identifiable Information (PII) and not wanting to reveal that information to the general public. This concern causes the EPA to have conflict that can cause a challenge in communication. Another thing was the development of a map viewer. The information was available online, but it was grouped into chunks of properties. The map viewer gives geographical based information to the public and protects PII.
- (44) Collier: In your opinion, what went well with communicating risk at the site?
- (45) Petroff: The EPA has done a good job of explaining risk at the site. It is pretty simple. Risk exposure is through direct contact with soils and the EPA, going back to the first meetings that I was a part of, was explaining the exposure risk is from 0 to 2 feet and that explanation has been pretty consistent ... anyone with an interest in the site is aware of that fact. The concentration levels have been presented again and again and the exposure risk has been presented very consistently, and the public should have a good grasp on the risks that are associated with this site.

- Q6. What types of questions/concerns have you received in the past from the local communities and how did you respond?
- (46) Collier: Has your office received any questions of concern from the public?
- (47) Petroff: A few, and as the point person for the site, I will talk to residents. There's one gentleman that calls me every couple of weeks. He's very interested in the site, and he'll call with technical questions and as a support agency, I will remind him of what role I serve and that I can direct him to the appropriate person to address his concerns.
- (48) Collier: Do you get any questions or concerns about any other contaminates at the site?
- (49) Petroff: No not really, just lead and arsenic.
- (50) Collier: Do you think the community understands the differences between the two contaminates and the potential impacts of the two on their health?
- (51) Petroff: Yeah, I guess so. In this particular case, they're both dealt with in the same manner. It comes down to whether or not the dirt had to be hauled away. The bulk of the concern has been with the lead-based paint and it's potential impacts on children, a lot more interest in lead exposure [than arsenic].
- Q7. Did you receive, or have you heard any feedback from the community, positive or negative, about how risk communication was handled for this site? If so, please describe.
 - (a) Have any evaluation methods been used to determine the effectiveness of risk communication activities that took place for this site? If so, please describe these methods used.
- (52) Collier: Have you heard any feedback about how risk communication was handled at the site?
- (53) Petroff: No, no feedback specific to risk communication.
- (54) Collier: At the meetings that you attended, have you heard any comments about how the public was communicating with the them?
- (55) Petroff: It's not specific to this site, but there's a lot of broad frustration. People tend to want to know if their particular illnesses were caused by the site. And we can't answer those types of questions. ATSDR will be present at meetings to address health concerns, and that question/concern seems to come up again and again and that is always in the back of the minds of the public. That's a known frustration, and I don't know the solution.
- (56) Collier: Does Mr. Johnson attend these meetings as well?
- (57) Petroff: Not all, but a lot of the meetings, yes.
- (58) Collier: Have there been any evaluation methods put in place to determine if risk communication has been effective?
- (59) Petroff: I don't know.
- Q8. What are the current conditions at the site?
 - (a) Are there any current human health and environmental threats still present for this site?
 - (b) Are there any upcoming sampling or risk communication activities scheduled to take place for this site?

- (60) Collier: If you could describe the current condition of the site, and your role with the remedial folks that would be great
- (61) Petroff: The site has been broken up into different chunks. There's an Operable Unit One and there three zones within that unit. Zone 1 was public housing, and there hadn't been really any real remediation in that area. Zone 3 is largely residential. Zone 2 as well. Zone 3 and 2's yard cleanups are fairly routine, with Zone 3 being nearly done. Zone 2 will be completed by next construction season. They've gone really well. The residents have been asked for their input on how well these cleanups have gone and they're feedback results have been really high. 9s and 10s out of 10 ... so really high. Zone 1 was made obsolete by the demolition of the public housing so there had to be an amendment. People want to see that area excavated deeper than two (2) feet. The other portion of the site is the Operable Unit 2 and that site isn't as far along as the other site. It's still in remedial investigation and we have calls with the consultant, and they're going to be doing one in a couple of weeks where they're going to present their data. Overall, I've been impressed with the EPA.
- (62) Collier: What's the reason for splitting the zones up into 1, 2, and 3?
- (63) Petroff: It had to do with negotiations with responsible parties. The parties weren't on board right away with paying for the remediation. Once the investigation was completing in 2012, the EPA with DOJ launched into investigation with the responsible and that [the Operable Unit designations] was hammered out over a period of time. And breaking the Operable Unit 1 into three zones was a way of getting the work started. The responsible parties didn't want to sign onto all the remediation. They wanted to bring on other parties they felt shared responsibility. And the EPA and DOJ just wanted to get the work started so they divided it up into zones where the work could get started.
- (64) Collier: I have two more questions ... Are there current human health threats?
- (65) Petroff: Yes, particularly in Zone 1. There are extremely high levels of lead in Zone 1. The shallow soil that needs to be addresses. There is groundcover to seal it in, but any sort of redevelopment could be a serious issue for exposure. No current exposure is an issue, but there is certain potential exposure
- (66) Collier: Are you aware of any current sampling?
- (67) Petroff: Yes, there will be sampling in Operable Unit 1 and some groundwater sampling. There will be biota sampling in Operable unit 2 and that information will be incorporated into the larger investigation which will affect our risk assessment.
- (68) Collier: The EPA and HUD issued a new standard for lead dust. Have you talked about this standard and do you know how it will affect the site?
- (69) Petroff: No, we haven't talked about the new standard. Evaluating lead dust has been pretty unique. This site is unique, because it was required in the "record of decision" to be protective of the health by assessing indoor lead dust. They were paving new territory here and put a lot of effort into finding out what were the appropriate levels. IDEM wasn't involved in that work, and I don't have an answer to your question.
- (70) Collier closed out the meeting, thanking Petroff for his time.

From: Collier, Morgan

(b) (6) @idem.in.gov; Trynosky, Jill; Park, Bo; Chugh, Alisha; Mulchandani, Roopa; Krenzien, Allison To:

Gerhart, Seth; Lovingood, Christina Cc:

FW: OIG Audit of EPA Communication of Human Health Risks at the USS Lead/East Chicago Site Subject:

Start: Thursday, June 27, 2019 2:00:00 PM End: Thursday, June 27, 2019 3:00:00 PM

Location: Call-in number: 202-991-0477; conference ID

Seth -Hi. Could you attend and write-up this meeting? If it conflicts with your indexing, let me know. Thanks, Jill

----Original Appointment----

From: Collier, Morgan

Sent: Tuesday, June 18, 2019 11:37 AM

To: Collier, Morgan (b) (6) @idem.in.gov; Trynosky, Jill; Park, Bo; Chugh, Alisha; Mulchandani, Roopa; Krenzien, Allison Subject: OIG Audit of EPA Communication of Human Health Risks at the USS Lead/East Chicago Site When: Thursday, June 27, 2019 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Call-in number: 202-991-0477; conference ID (b) (6)

The OIG team will be speaking with IDEM staff member Doug Petroff to get a direct perspective on EPA's risk communication activities for the USS Lead/East Chicago Site.

Our notification memo https://www.epa.gov/sites/production/files/2019-02/documents/_epaoig_notificationmemo_2-4-19_communication.pdf is available on-line.

Please use the call-in number below:

202-991-0477; conference ID (b) (6)

Thank you,

Morgan Collier

Morgan Collier | Program Analyst

Office of Audit and Evaluation

U.S. EPA, Office of Inspector General

WJC Building West | Room (b) (6)

1200 Pennsylvania Ave, N.W. | Washington, D.C. 20460

(202)566-1136 | collier.morgan@epa.gov <mailto:collier.morgan@epa.gov>

Communication of Human Health Risk at Sites in OLEM Programs

OA&E-FY19-0031

NAME	DATE	COMMENTS
WP Prepared by: Naomi	8/8/2019	
Rowden	11/8/19	
Reviewed by:	12/4/19	[x] - I reviewed this WP and found it satisfactory.
Jill Trynosky		(No comments were provided.)
		I reviewed this WP and found it satisfactory.
		I also included comments in a
		red colored font.
		All comments resolved
Edited by:		
Reviewed by:		

<u>Title</u>: Meeting and briefing with Region 5 remedial program staff regarding EPA's risk communication activities for the USS Lead/East Chicago Superfund site.

<u>Purpose</u>: The OIG team will be meeting with Region 5 remedial program staff to discuss follow-up questions on the EPA's risk communication at the USS Lead/ East Chicago site.

[Project Guide Step 42]

Sources:

Date/Time: August 7, 2019; 9:30am-10:30am Pacific; **Location:** Via Phone Conference - A call-in number was provided for those dialing in remotely: 202-991-0477; conference ID (b) (6)

List of Attendees:

#	Name	Title/Organization	Contact Information
1	Thomas Alcamo	R5, RPM	312(b) (6)
2	Timothy Fischer	R5, Remedial Response Branch Chief	312
3	Kevin Adler	R5, Remedial Response Section Chief	312
4	Eric Levy	R5, Audit Follow-up Coordinator (AFC)	312
5	Sarah Rolfes	R5, Superfund Remedial Project Manager (RPM)	312
6	Jill Trynosky	OIG-OAE-LCWM Project Manager	202
7	Bo Park	OIG-OAE-LCWM Team Member	215
8	Morgan Collier	OIG-OAE-LCWM Team Member	202
9	Roopa Mulchandani	OIG-OAE-LCWM Team Member	415
10	Alisha Chugh	OIG-OAE-LCWM Team Member	202
11	Naomi Rowden	OIG-OAE-LCWM Team Member	206

#	Description/Title	Source Document
1	Prepared questions for R5 remedial program staff	<u>Link:</u> Questions for East Chicago Remedial 8-7-19.docx
2	Calendar invite for meeting	Link: East Chicago Remedial 8-7-19 calendar.pdf

Scope: The purpose of this work paper is to document the meeting with Region 5 remedial program staff, to discuss follow-up questions regarding the EPA's risk communication activities at the USS Lead/East Chicago site. The meeting was held on August 7, 2019.

Conclusions:

- 1) Remedial and removal work was going on at the same time, and communication roles overlapped. Staff from both programs coordinated to speak with residents. All communications went to the same CICs; staff from both programs attended public meetings. [Details 1 and 2]
- 2) The remedial program scored and listed the site [USS Lead] in 2009. Isolated removal actions took place prior to that. More robust risk communication strategy after the remedial program became involved in 2009. In 1985 they looked at potentially listing it, but the company decided it wanted to address its parcel under RCRA rather than Superfund, so it didn't get listed at that time. [Details 4]
- 3) A lot of confusion about aerial deposition, many residents thought that was still happening, so had to do a lot of explaining that this was historical when the site was still operational. Talk to them about how soil can get tracked in when they enter their home. They use a very high-

powered hepa vacuum to clean homes, they go over all those concerns during the meetings with homeowners. Another issue is dust from lead paint. [Details 10]

4) As they have had fewer people showing up for public meetings, they decided to do a newsletter instead to keep people informed. The staff who prepare the newsletter check in with the remedial staff for updates and everyone agrees to what goes out in the newsletter. [Details 24-25] <u>Link: PSSC-USS Lead East Chicago Draft Memo.docx</u>

Meeting Details:

(Roopa leading the meeting for OIG)

1) Can you describe the role of removal versus remedial staff at the site, especially in communicating to the public?

Are we talking about in 2016? Both remedial and removal going on at the same time, communication roles overlapped each other, we all spoke with residents, all went to the same CICs.

2) What are the differences in processes or requirements between the two programs?

No differences in processes between the programs. Yes, the coordinate with each other, all worked out of the same office out at the site so had close communication. Really was a big team effort.

Examples of where remedial and removal talked to people separately:

Separate for zones 3, in 2016. For one on one meetings they would break it up, so they didn't all talk to the same people at the same time, to sign off on documents. But overall a very coordinated effort. For public meetings they were all together, etc.

3) Can you walk us through the communication EPA has when it comes to the residential yard remediation process?

In zone 3 if a property needs to be remediated, the contractor sets up pre-construction meeting with homeowner, the EPA and contractor meet with homeowner, go over sampling results and concerns, then walk through the remediation itself, introduce contractor, what to expect etc. They answer all kinds of questions, provide contacts for questions beyond the work they are doing. Contractor reaches out to homeowners about a week in advance to let them know they are coming, EPA staff on site every day of the week while work is going on, available for homeowners who have concerns and questions.

After work is done, had a post-construction conference with homeowner made sure they are satisfied, and have them sign off on the work.

Examples of concerns – pets buried in the yard, ppl concerned about disturbing that. Access in and out of their property at all times. An elderly woman who could only park in one spot, the workers were very considerate and made sure she could get in and out and carried groceries for her and such. People had water concerns, gave info for where they could get water filters, where to get blood lead testing etc. had fact sheets for all of this to give to people.

4) Discussion on the timeline at site – When was the risk first discovered and when was this communicated to residents (there's a lot of contradicting information about this)?

In the remedial program, scored and listed the site in 2009. Isolated removal actions prior to that. More robust risk communication strategy, remedial program became involved in 2009. In 1985 looked at potentially listing it, but the company decided it wanted to address its parcel under RCRA rather than Superfund, so it didn't get listed at that time. None of the people in the meeting today were personally involved in the original listing. Janet is who to contact for history and timeline.

5) How were the zones delineated?

The zones delineated by the consent decree, when went into negotiations, couldn't get an agreement on zone 2 arguing about who is responsible. At the time West Calumet was occupied, zone 3 had an agreement, started work in zones 2-3 and then with something closing in zone 1 that changed everything. EPA was ready to start there in 2016.

6) How were the sampling and communication of sampling results in each zone carried out?

Same for zones 2 and 3. A memo put together, a procedure, once sampling results received, non-final, non-validated, they call the owner within 48 hours. Jan and Charles make contact. After final results are validated the homeowner gets a letter. Time for validation varies, depending on how many samples and which lab used. Maybe about a month.

7) Have you heard any concerns about results being slow, or hard to understand?

Not for the RD sampling. Only thing was people lost their letters, so in 2017 and last year people wanted additional copies. When they met for pre-construction, they explained all this. Why they were doing one section and not another of their yard if parts were below screening/action level. Lot of effort to get people to understand the screening level, why is the neighbor getting cleaned up and I'm not? Big effort to get homeowners to understand no risk if below screening level.

7a) Did it seem residents were receptive and understood that?

I think people understood, but probably not all accepted what we were saying. A university professor even came and sampled, and it came back under the cleanup criteria which validated what we were saying.

7b) Do you think it was confusing for people to have the University come sample?

No, the CAG made it clear why they were bringing the University out to do additional sampling, so don't think it was confusing. Only real confusion that came out of that sampling was that those folks had flyers that had a different cleanup number, from the West Coast because some states have different cleanup number, lower than what EPA has. We had concerns about their lab and validation standards but didn't get involved.

8) The contaminants of concern listed are lead and arsenic, but what about cadmium/zinc oxide and are there others? There are also constituents of interest (COI's)-metals and polycystic aromatic hydrocarbons (PAHS).

What information has been made available about the other contaminants?

In ROD there is a big discussion and more information about the contaminants. Other sampling has not influenced them to change their original contaminants of concerns.

The RI would have included information on other constituents sampled for, and those were some of them, and it would have explained that those weren't the main ones they are concerned about.

9) How does EPA communicate about the potential migration routes of contaminants?

All the air monitoring data we have, dust monitoring data for the demolition. When the excavation was happening, all the air monitoring going on. For ground water that is a different OU that is going on now. In past they looked at lead or arsenic had moved off the site into the nearby properties. During demo of West Calumet housing complex EPA was very concerned about that spreading contamination, had full time oversite on the monitoring of the air etc. during the demolition. Made those results publicly available. EPA didn't have a role in the demo, but they did monitoring, on their own.

For zones 2-3 have a no visible dust on site policy. So, have monitors making sure that they are wetting the soil appropriately etc. all this was communicated to residents, told them they can get the air monitoring data if they want it.

10) There were comments received that community members did not understand how contaminated dust got into their house, how was this explained to them?

A lot of confusion about aerial deposition, many residents thought that was still happening, so had to do a lot of explaining that this was historical when the site was still operational. Talk to them about how soil can get tracked in when they enter their home. They use a very high-powered hepa vacuum to clean homes, they go over all those concerns during the meetings with homeowners. Another issue is dust from lead paint.

11) Why is the soil around the trees removed and replaced, rather than kept in place? And how was this decision made? Is this a standardized approach?

Around trees, we remove top 6" of soil, outside of drip line remove everything, inside drip line try to remove minimum to protect the tree itself. This is a standard approach to try to save the tree. At other sites, they have had to cut down a lot of trees depending on contaminants of concerns. Where there is a large root ball it is mainly roots, so they do the 6" removal.

12) For the CDC <u>August 2018 update</u> on child lead levels in East Chicago, the findings were revised. Was EPA involved in the conclusions for the initial report or the update?

No, not involved. Updated on the progress of it. Big issue for the community when ATSDR was doing that report. People/ATSDR would request info from them, and they would provide that.

12a) Was there an impact on the EPA's remedial activities based on the change in CDC's conclusions?

No, not as of today it hasn't.

13) Who in Region 5 worked on the health/toxicological issues for East Chicago?

Keith Kaczynski?? She is on the lead national work group.

14) What does EPA do with the satisfaction surveys for contractor work?

Satisfaction from residents? *Yes.* It's a measure we use during the remediation itself to make sure we are responding to residents, if there is anything we need to address with the contractor. If we see issues with the contractor, we try to correct that immediately. It is a way to try to make sure residents are happy. Some people you just can't but we make an effort to make people happy. Some residents from 2016 still have questions and we still make time to meet with them.

15) Examples of feedback on contractor and how you've addressed that with the contractor?

For the most part positive reviews. Just this morning got a call from someone who is upset we have to dig up her yard, but she made a point of saying that the crew has been really nice they have done good work, they even bought her a sandwich one day. We do have some residents who are just not happy, but it is very few of them. We try our hardest, sometimes there are just things we can't do. One resident wanted them to take out a UST in his backyard, which wasn't even over screening/action level, so we can't do that. He was very unhappy, but we just can't do that.

16) Is the data shared with the PRP and/or the community?

During the actual work, our monthly meetings, we talk about how we completed a survey and the results. Have weekly meetings with RP and they get updated on that. Contractors do their own surveys and see those results and they go out of their way to make people happy too. If they/EPA were to see bad behavior by a contractor, they would do something about it right away, thinks the contractors know that and know they are expected to behave nicely.

17) How does EPA determine who it communicates with about the site? [Internal Note: This question came up during our meeting with HUD-OIG because, according to them, EPA never communicated with HUD]

They have residents call with questions, they get questions from professors at universities — whoever reaches out to them they talk with, regardless of where/what zone someone is in or whatever. Anyone can sign up for the mailing list.

18) What about the communication EPA initiates, with other agencies?

Frequent contact with the state IDEM right now involved in discussions on an agreement. In 2016-2017 had interagency calls on a weekly basis, health agencies, including ATSDR, HUD, elected officials etc. as they began getting less interest, they stopped doing so frequently, now only as needed. They were doing weekly Saturday meetings for the public for a while, but after interest dropped off, they stopped holding them.

For outreach materials and things like that, talk to Janet.

HUD wanted their involvement in the demo due to concern about spread of contamination, they put a lot of money into it. Wanted EPA to be involved, tried to get them to pay for EPA oversight, they couldn't do it, so EPA did the oversight on its own anyway. Fortunate they got a good experienced contractor who has done demo on other superfund sites.

19) Describe the groundwater investigation (arsenic dust)?

Sharon (?) and I involved in the groundwater investigation, Mueller industries will be doing it, Cat Thomas more involved, have to talk to her. Long-term investigation going on, groundwater monitoring to test seasonal levels. Don't know a lot of details so talk to Cat.

20) Have there been any changes with remedial operations since the OIG's visit?

Both political and institutional challenges ongoing at the sites. Interested in learning from OIG if there are things they can do better. This site has been all-hands-on deck, a lot of resources on this site to try to fix this.

21) Have the RPM's received any new comments/concerns raised by the community? Has EPA started making any changes based on those concerns?

Lake County Indiana Economic Alliance has a proposal for development, so they want it zoned mixed industrial commercial, but that is for the state/local to decide. Haven't had anything new. Have seen lot of news articles. They think some of the activists and such don't understand the OIG role, thinks OIG did explain our role, but that people don't understand it, they think you are looking at the whole decision and everything.

22) When are the results from the OU2 groundwater monitoring well, soil, and tissue samples from plants and invertebrate from studies conducted in 2018/2019 expected to be shared with EPA?

Some groundwater data from the first couple quarters available online, but not sure when the full report will go to EPA. It is a phased study, so could take a while. If OIG wants to send questions they can talk to Cat and try to get answers (when she returns from vacation).

23) Does EPA plan on sharing this with the public?

It will be shared with the public when EPA gets it.

24) Morgan: Is the remedial team involved in the newsletters going out?

Janet and Charles involved in that, they ask us for updates on the zones. They discuss what they want to highlight in the newsletter and make sure there is agreement, management and regional counsel review them before they go out.

25) Do you know why they started the newsletter?

Have had less and less residents coming to public meetings, but they still want to communicate. So, they did an open house at beginning of the year, and then now doing the newsletters to keep the flow of information to the residents.

No further questions, meeting concluded.

Removal Interview —USS Lead/East Chicago Site

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Allison Krenzien	8/9/19	
Reviewed by: Roopa Mulchandani	8/19/19 9/3/19	[]: I reviewed this WP and found it satisfactory. (No comments were provided.) [x]: I reviewed this WP and found it satisfactory. I also included comments in a blue colored font. Who are "IWM consultants"? see purpose [x]: All comments have been resolved.
Edited by: Allison Krenzien	8/21/19	Must have been a holdover from another WP. Deleted phrase.

<u>Purpose</u>: To interview regional staff regarding the USS Lead site on current conditions, communication activities, and other related questions.

Project Guide Step #: 42

Source(s):

Meeting/Interview Information:

Date & Time/Duration	Meeting Location
August 8, 2019 11:30 AM-12:30PM (ET)	Teleconference

#	Name	Title/Organization	Contact Information
2	Allison Krenzien (AK)	EPA OIG Program Analyst	303(b) (6)
4	Jill Trynosky (JT)	EPA OIG Project Manager	202
5	Morgan Collier (MC)	EPA OIG Program Analyst	202
6	Bo Park (BP)	EPA OIG Program Analyst	215
7	Roopa Mulchandani (RM)	EPA OIG Program Analyst	415
8	Brad Benning (BB)	EPA R5 Environmental Scientist	312
9	Kristina Miller (KM)	EPA R5 On-Scene Coordinator	312

10	Dan Haag (DH)	EPA R5 On-Scene Coordinator	312(b) (6)
11	Jim Mitchell (JM)	EPA R5 Physical Scientist	312
12	Sonia Vega (SV)	EPA R5 Physical Scientist	630

Source(s):

#	Description/Title	Source Document
1	Interview Questions	Link: D.30e - [IP] East Chicago Removal Follow-up 8.8.19 - Questions for East Chicago Staff_Removal.docx
2	Meeting Invitation	Link: D.30e - [IP] East Chicago Removal Follow-up 8.8.19 - R5.Removal.Interview_8.8.19_Invite.pdf

Scope: Meeting covered questions/discussion about the USS Lead site in East Chicago, Indiana from the perspective of the EPA Region 5 Removal staff.

Conclusions:

- EPA R5 Removal staff got involved at the site in 2016 with interior dust sampling and continued through 2017 until the site transitioned to a Remedial project in the late spring/early summer of 2018. (Details 1.i and 1.ii)
 - a. The efforts in June/July 2016 began by putting down mulch to cover exposed soil/dirt in Zone 1 (the housing complex area) after high lead levels had been identified in the area and time-critical actions were required. (Details <u>2.i</u>, <u>2.ii</u>, and <u>2.b</u>)
 - b. Signs were also posted in the area to warn of the danger of playing in the soil and to keep off the mulch. (Detail 2.iii)
- Janet Pope, a Community Involvement Coordinator (CIC), knows best how sampling/removal actions were communicated in each area. (<u>Detail 2.d.i</u>) However, she would regularly communicate with On-Scene Coordinators and Regional Program Managers when interfacing with the community. (<u>Detail 2.d.ii</u>) She was heavily involved with the community. (<u>Detail 2.d.ii</u>)
- 3. When the Removal team started in July 2016, they mobilized to create a response under incident command system (ICS) to offer cleaning for Zone 1, including the mulch program, and reporting of sampling for Zones 2-3. (Detail 2.d.iv)
 - a. All information was reported within ICS and there were daily briefings and phone calls. They had a presence and were interacting with the public through all zones and information was reported to the community and from the community to people on the ground to ICS to management to D.C. and that continued until ICS stood down. (Detail 2.d.iv)
 - b. The briefing calls included 7-10 people including Matthew Stanislov. (<u>Detail</u> <u>10.iii</u>) They did not recall if anyone from Office of Environmental Justice was present, but Office of Land and Emergency Management was there. (<u>Detail 10.iv</u>)

- 4. Dust sampling results were sent to residents in the summer of 2016. (Detail 2.d.v)
 - a. When they got their results, they would call them with the preliminary information (before validation) to tell them if it was above or below the standard. (<u>Detail 2.d.vii</u>) This decision was made by the acting Division Director. (<u>Detail 2.d.vii</u>)
 - b. After validation, they were sent a letter, after working with CICs, Agency for Toxic Substances and Disease Registry (ATSDR), and health department to make sure it was appropriate and understandable. We worked closely with CICs and they were critical to interfacing. (Detail 2.d.vi)
- 5. The dark brown/black muck in basements in Zone 3 was reported at a community meeting in 2017. The Assistant Regional Administrator asked the Removal team to look into it. They put together a team consisting of EPA Water Division, Indiana Department of Environmental Management (IDEM) Water Division, and East Chicago Water Department staff to sample and investigate. (Detail 5.a)
 - a. The results were determined to be mold. (Detail 5.a)
 - b. A letter was sent to the residents with risk information. (Detail 5.c)
- 6. There was pre-/post-excavation survey work done to make sure there was proper drainage on properties. (Detail 6)
 - a. Routinely, prior to excavations, they did walk the property and talked with the property owner about the work and asked about the home, current seepage/flooding, and did a video recording of the home (exterior and basements) and condition of foundations. (Detail 6)
 - b. When excavation work occurred, they sloped away from foundations. They did 6 inches at the foundation and sloped away so they didn't disturb soil attached to the foundation. They weren't digging to bare foundation and that was to prevent damage to it. And that was communicated to residents. (Detail 6)
- 7. All risk/health information is coordinated with ATSDR, state, and local; and it has to be vetted before it's communicated. They engage from the beginning about cleanup levels and standards, but the health people coordinate the other information. (Detail 7.i)
 - a. Everything is site specific. State and local health departments understand community better than EPA does. (Detail 7.ii)
 - b. Local and state health departments and ATSDR had been intimately involved when EPA initiated the ICS and are involved routinely in calls, language of results letters, and how to communicate. (Detail 7.iii)
 - c. Overall coordination between EPA and health agencies is good. (Detail 7.iv)
- 8. Routinely, from the time the Removal team went out there in 2016, there were daily briefings to headquarters sometimes twice per day about anything ICS was doing. (Detail 8.i)
 - a. There was a lot of back-and-forth about who was doing communication and sometimes headquarters had recommendations and the Removal team would implement them. (Detail 8.i)
 - b. Those briefings and calls continued through the fall/winter of 2016 and into 2017. But they became weekly briefings and calls with headquarters. (<u>Detail 8.ii</u>)

- 9. "If you see success with another site, you try to employ it at your site. When you see someone do a good job, you try to use it. You make sure you're understanding residents and they're understanding you. There is a lot of communication even between colleagues, and it's a continual learning process. We all are doing that as part of our job daily." (Detail 10.i)
- 10. "The key is to involve locals. They know each other... [and] we work closely and some people have a better ability to communicate and we reach out to people to assist us and learn from them. We are technical people (scientists/engineers) but some people have more ability to do that and we help each other out and connect to resources and keep growing as professionals." (Detail 10.ii)
- 11. The Removal team does not have any specific communication procedures. (<u>Detail 10.v</u>) However, the Community Involvement Coordinators do go with the team to the site. (<u>Detail 10.vi</u>) They said that the communication method is very similar to the Remedial team's except that Removal deals with time-critical actions. (<u>Detail 10.vii</u>)
- 12. The Removal team did not have any suggestions of technical tools that could help them do their jobs better. They said that the real key was flexibility since every site is totally different. (Details 10.viii, 10.ix, 10.x, and 10.xi)
- 13. For all Removal team actions at this site, the priorities were first set by whether there was a pregnant woman or a child under five years in the home. (Details <u>10.xii</u>, <u>10.xv</u>, and <u>10.xvi</u>)
 - a. If someone is discovered through the removal process who fits this priority description and was not identified earlier, they are moved to the priority list. (Detail 10.xv)
 - b. However, they did note that leaving the property (in the case of Zone 1) or consenting to access generally may create problems where even someone high on the action list may be acted on later than another by the owner's choice. (Detail 10.xiii)
 - c. Prioritization was explained to residents during the access agreement process as well as at public meetings. (Detail 10.xvi)
- 14. The Removal team expressed concern that OIG may have missed the opinion/perspective of those who lived in Zone 1 but left the community after they had to leave the housing complex. (Details 10.xviii) and 10.xviii)
 - a. However, they did provide those people post-cleanup surveys which should have been provided to OIG. (Similar surveys were also provided to residents in other zones.) (Details 10.xiv and 10.xx)
 - b. Some of those people may have simply been uninterested and not been a part of the conversations when OIG was in East Chicago. (<u>Detail 10.xxi</u>)

Details:

Predetermined questions below are in italics. Bold font added by analyst to denote information used to support conclusions.

MC facilitated the meeting including introductions.

1. For each removal staff member present, can you state how many years you have been working at the East Chicago site, and what year you first started working on the site?

SV: I was only involved in first phase which was the West Calumet housing complex relocation efforts.

BB: I was involved in the beginning when we first got notified and stayed through the first summer doing interior cleaning of apartments and relocation.

KM: I got involved in summer 2016 with interior dust sampling and then in 2017 on and off during the removal efforts.

DH: I started in October of 2016 and focused on administrative settlement agreement and order on consent (ASAOC) and removal work through 2017 and then helped **transition to remedial in spring/summer 2018**.

JM: When I started I focused on Zone 1 from June 2016 to January 2017.

2. When was the risk first discovered BY EPA at the USS Lead site? When and how was the risk communicated to residents?

JM: Most of us here with removal wouldn't know off the top of our heads, but we could look into our records. We weren't involved when it was discovered. We aren't the best people to ask. It would be a better question for remedial.

MC: Remedial would know?

JM: Yes, we provided the timeline to you, but none of us were probably even with EPA then.

MC: When risk communicated to the community?

JM: BB was involved when it was first discovered and when we were putting mulch down which was in May 2016, I think, when removal started getting involved.

BB: It was late June/early July. They found high lead levels and were looking for way to get rid of it quickly. We did a tour with a risk assessor to look at exposure. Based on the data that had just come in, the initial thought was how to deal with it as soon as possible. We decided to at least go out and cover exposed soil/dirt with mulch. We also put signs out telling people to avoid the mulch and to avoid playing in it. This was before we even knew the extent of the situation. This continued on through first weeks of July and then as we were progressing to next steps, the mayor declared it an emergency and decided on an evacuation. So we had to come up with a new game plan.

a) Read that IDEM did soil testing 1985, it became a RCRA site in 1985 and then moved to SF program, when was this transition started and when was it complete?

Not asked.

b) When and why did the removal staff first get involved at the site?

BB: July 2016.

MC: What prompted it?

BB: There was data showing high lead levels in housing complex which was Zone 1.

MC: It looks like there were some time critical removals in Zone 2 like in 2008 and 2011 who did that?

BB: Tim Mickey was in charge of a few home removals.

DH: The earlier ones were performed by on-scene coordinators (OSCs) and in 2015 there was another done by Jacob Hassan and me. That was due to residential soil sampling coming in from soil sampling that was the bridge to the ASAOC.

c) Did EPA do any time critical removal actions between 2003-2013? (please state if this is incorrect, I also read that in zone 2, there have been time critical removals in 2008, 2011, and 2016). What was going on in 2003?

JM: I don't recall anything going on.

(1) Where did the time critical removals take place, which zones, and what contaminants were they dealing with?

Not asked.

d) How were the sampling/removal actions communicated in each zone?

DH: In Zone 2, all residential soil sampling was conducted by remedial so it was communicated by Community Involvement Coordinators (CICs), door knocks, mailings, etc. Janet Pope (JP) knows more. I came and Jacob [Hassan] came in the fall after sampling performed.

MC: When JP was putting information out does she consult with both teams or how does that work?

DH: In October 2016, as she was preparing documents for outreach, she would always consult with OSCs and Regional Program Managers (RPMs) and work with her to get access agreements.

BB: When we started out and during the interior cleanings and relocations, JP came out to be the public participation person and was out on site with them and at community meetings and was very active the entire time. She became permanent through most of the removal actions.

JM: When we started in July 2016, we mobilized to create a response under incident command system (ICS) to offer cleaning for Zone 1 including the mulch program and reporting of sampling for Zones 2-3. All information was reported within ICS and there were daily briefings and phone calls. We had a presence and are interacting with the public through all zones and information was reported to the community and from the community to people on the ground to ICS to management to DC and that continued until ICS stood down.

KM: Dust sampling results were sent to residents in the summer of 2016. When collecting the samples, we would speak to them and describe the risk and what had seen in other areas. When we got their results, we would call them with the preliminary information (before validation) to tell them if it was above or below the standard. After validation, they were sent a letter, after working with CICs, ATSDR, and health department to make sure it was appropriate and understandable. We worked closely with CICs and they were critical to interfacing.

MC: Who decided to release preliminary data?

KM: There was a memo from the acting Division Director that said we would do it within 48 hours of getting it.

SV: I was only involved in Zone 1 but also the OSCs and those in charge of relocation met with 100s of people when KM completed sampling and knew the complex needed to cleaned inside. I met with the residents and explained results, risk and why we need to clean and arranged to have them moved while we cleaned the property. I was on site the entire time. We had an open door policy, and people stopped by. We had lots of materials with ATSDR input, communicated with people in Spanish if needed, and it was constant interaction with community through the entire process of west calumet. I understand that continued. JP was heavily involved and others (at times 5-6 people) and had people come in and we answered questions and gave materials that explained risks and what could be done to avoid them.

- 3. Can you provide some background on what looks like delays in the process for the site to become an NPL site (saw in one report that it was initially proposed in 1992 and then proposed again in 2008, and then finally listed in 2009)?
 - a) Someone mentioned the PRP went bankrupt. Would that cause the NPL listing to be delayed or fall through?

JM: We would defer to remedial on that.

SV: Yeah, I don't know remedial enough.

b) Are there other reasons or factors that impacting the timing of the NPL listing of this site?

Not asked.

c) Why was it listed in 2009, what prompted this?

JM: While we may have some knowledge, if you want the most accurate information you should go to remedial.

4. During a period of time, between 1985 and 2006 when there were periodic removal actions, there seems to be a gap in communication with the public.—Could you touch on why that occurred?

Not asked.

a) What does EPA say to the community/public when asked why they weren't notified earlier?

Not asked.

- 5. We heard at the briefing meeting a few weeks ago that the removal team did some testing of the black/dark-colored muck found in basements. Residents showed us this material when we were in East Chicago.
 - a) What prompted the testing?

DH: That occurred in 2017 and that was in Zone 3. There were community members who brought it up in a community meeting and the Assistant Regional Administrator, Bob Kaplan, was there and he asked us to look into it further. So we put together a team with EPA's water division, IDEM's water division, and East Chicago's water department. We visited one resident who had the primary concern and a couple others with similar issues and took the team to their homes to take samples and look at the issue. Jacob Hassan said that it turned out to be mold identified through the team. We coordinated putting team together.

b) What are the results and have those results been communicated to homeowners and residents?

See <u>Question 5.a</u> for full response to question.

DH: In addition, IDEM provided sample results of their tap water.

c) Are there any health risks? And were communicated?

DH: Everything would have been in a **team letter** that was sent out.

6. Some residents were concerned that the removal and replacement of soil in the yards created conditions that contributed to the basement flooding, is that a possible cause?

DH: As part of work we did with residential excavations, there was pre-/post-excavation survey work to make sure there was proper drainage. Routinely prior to excavations, we did walk the property and talked with the property owner about the work and asked about the home, current seepage/flooding, and did a video recording of the home (exterior and basements) and condition of foundations. When excavation work occurred, we sloped away from foundations. We did 6 inches at the foundation and sloped away so we didn't disturb soil attached to the foundation. We weren't digging to bare foundation and that was to prevent damage to it. And that was communicated to residents. We walked them through process, expectations, crews, work, had contact information, had hotline information, and JP and Charles Rodriguez routinely visited. We also had a contractor that could communicate with resident or take questions and call me, Jacob [Hassan], or KM to come out and speak with the resident.

a) Does EPA record the condition of basements prior to removal and remediation and make note of whether basements experienced flooding before the soils are disturbed?

See answer to Question 6 above.

7. Are there any removal-specific procedures or guidance you follow when communicating sampling results or other health information to the public?

SV: I'm not sure I follow. In my experience in residential cleanup, our job is more cleanup and all risk/health information is coordinated with ATSDR, state, and local; and it has to be vetted before it's communicated. We engage from the beginning about cleanup levels and standards, but the health people coordinate the other information.

DH: Everything is site specific. They [state and local health departments] understand community better than we do.

MC: How has that been for this site?

DH: They've [local and state health departments and ATSDR] been intimately involved when we initiated ICS and are involved routinely in calls, language of results letters, and how to communicate. For our part, communication between us went very well. There are always challenges technically in getting information out and targeting them and addressing many layers of challenges with a site like this, but I think overall communication was very good.

8. Do you coordinate with or seek approval from OEM headquarters on the removal team's communication with the public?

JM: Routinely, from the time we went out there in 2016, there were daily briefings to headquarters sometimes twice per day about anything ICS was doing. There was a lot of back-and-forth about who was doing it [communication] and sometimes they [headquarters] had recommendations and we would implement them.

DH: Those briefings and calls continued through the fall/winter of 2016 and into 2017. But they became weekly briefings and calls with headquarters.

9. Are there any steps you take to determine whether a resident understands the information you are providing?

SV: In my experience, coordinating with health agencies, who know the community and we meet with residents to go through everything until they feel comfortable. We make it available in any languages necessary and will get translators so they get it in a way that's relatable to them.

10. Are there any tools, information or resources that would help you do a better job of communicating with the public? Or anything other sites using that could have been applied?

DH: I think the answer is everybody on this call is trying to better who we are and how we approach the job especially communicating with the public. If you see success with another site, you try to employ it at your site. When you see someone do a good job, you try to use it. You make sure you're understanding residents and they're understanding you. There is a lot of communication even between colleagues, and it's a continual learning process. We all are doing that as part of our job daily.

SV: The key to involve locals. They know each other and you need to know if Facebook will reach the community. Not everyone has computer or internet access. And as DH said, we

work closely and some people have a better ability to communicate and we reach out to people to assist us and learn from them. We are technical people (scientists/engineers) but some people have more ability to do that and we help each other out and connect to resources and keep growing as professionals.

MC: Does anyone else on the OIG team have any questions?

AK: No questions.

BP: No questions.

RM: No questions.

JT: I've been listening to the information shared and want to get more details on when talking about ICS, who in headquarters was providing advice on communication with residents?

JM: That was my job, it was Matthew Stansilov. I don't have list in front of me, but there were at least 7-10 people on those calls.

JT: So it was Office of Land and Emergency Management (OLEM)?

JM: Yeah, different management layers from OLEM.

JT: Was anyone from Office of Environmental Justice involved?

JM: I'd have to look at my notes.

JT: Do you have any **specific communication procedures.** For example, Superfund has the Community Involvement handbook.

SV: CICs go with us to site/removal. They work with us.

JT: So nothing specific for guidance for removal/remedial? It would be the same?

SV: The difference would only be timing.

JT: With the time sensitive nature of the actions, are there any **technical tools** that would help enhance ability to communicate?

??: When we go out, we're embedded in community and knocking on doors and providing handwritten information and sitting down with them. We have given them special numbers, we're monitoring social media and monitoring the pulse of the community. We are providing web viewers to give the status of actions while protecting personally identifiable information. There are many people in the structure (state, local, and federal) so we're always open to other ways. When we interview, especially with Sonia [since she is bi-lingual] we try to gauge understanding and some were an hour or two long. We're trying to do the right approach and get the right people involved. We're different since we're truly embedded. We are a part of the community when doing our job.

SV: It all depends on the individual community. Some only want one-on-one interactions and there are some who won't open the door and we will do all of it. When we are in an emergency

action, we are there every single day. So they have one contact person to come to. Some people want technology, some people want paper and to sit with them and speak in their language and some will feel more comfortable if there's a health educator with them

DH: The key to lot of what we were doing and to our success was flexibility. Everyone on this call spent early mornings, late nights, weekends, and holidays to be there when convenient for the residents for any sampling, pre-/post- excavation walks, etc. Flexibility is key. There is no one right answer. There's not one thing we could say because it varies so much from community to community.

BB: Even in this example, there was constant communication. We were responsible for getting children to-and-from school safely. They had our numbers and we gauged if they had questions and if they understood the risks.

JT: During removal, were there communication challenges related to the sequencing of activities? It seemed like some people didn't understand how you chose to clean and the sequence of the removal actions.

SV: In my experience with many sites, you try to target highest contaminated areas, but are dependent on the resident. If they're not ready to relocate until a specific time, there is a medical reason, we need to find a handicap-accessible location, or transport for children, that can affect timing. But there is constant accommodation and communication. As I recall, there was never an issue that someone was worried and wanted to leave right away. Sometimes they even wanted to wait for an event. It's constant communication with them to make sure it's not disruptive. But we can't make them leave—it's all voluntary.

BB: We received a list from the housing complex of how many residents were there and who was high priority from the health department and ATSDR (which were children over 5 years and pregnant women). People with highest risk were done first and then we did the rest of the residents. If we found something had been missed, then they moved on the list based on who we cleaned and cleaning homes first from dust.

SV: This is a voluntary process, but we have to coordinate with them.

DH: When it comes to removal and yards, there was prioritization based on contamination levels, age of children, pregnant woman being present and these were explained during the access agreement and as sample results came back and were discussed with the resident. That wasn't just communicated at those times, but also at public meetings when discussing work and progress. We told them how we set priorities and how we were going about it in Zones 2-3. (ASAOC and removal was very similar in that approach when it came to yards.)

JT: Is there anything else we haven't covered you think is important for us to understand?

JM: I just want to ask a question. Were there any other ways- I know you had a call and you had a session in East Chicago- other than the session was there any door-to-door or other ways you sought information? A lot of questions you asked we heard them over and over. Was there anything else you did?

MC: We had a listening session, did a survey, and had an inbox for anyone who didn't make it or wanted to email/call us. We had a media notice.

JM: Did it go out to all residents?

MC: We had a mailing list we sent it out to of emails from the CIC.

JT: We also met with three community groups and we've spoken to couple community leaders. We didn't go to doors, we didn't go to mailings. We just didn't have enough time. Are there people you think we didn't reach?

SV: People from Zone 1. We don't know where those people went after they were relocated.

JM: The only person that knows is the local health department since they were responsible for tracking. We cleaned 324 houses in Zone 1 and all those families were relocated. That might be good to get their perspective. When we were finished, we had a survey from post-cleaning. I think we gave you that.

DH: Those surveys even went to residential excavation sites. They went to each property owner/tenant to provide a grading of overall communication, work, and professionalism of staff/contractor. That was communicated with JP in 2016-2017 and may have even continued into 2018-2019.

JM: Have you seen those surveys?

MC: I have seen the ones from remedial but not removal. I may just not have gotten to it yet.

JT: Would it have been combined?

DH: It may have been. What JM is talking about was solely from the housing complex. The ones I'm talking about was for yards/interior cleanings similar to remedial actions. They were just distributed by different contractors.

JT: It did seem like there were ome people who said they had lived in Zone 1.

DH: There are a number of community members we interacted with who remained uninterested in meetings/groups. They led ... [AN: phone dropped and had to call back in] It was those individuals that we encountered, and I don't know if you got feedback from them if they weren't provided something.

JT: Thank you for pointing that out. We'll take a look at if we think there are sections we might have missed. It's possible with the amount of time we were there. We tried to talk to community leaders who had been there and understood the situation. We compared notes to see if people are telling us different things. I don't think that's the case, but we will look at surveys, Five Year Review writeup and what CICs have prepared which is extensive. It seems like a lot of information provided from EPA.

Interview Questions for ATSDR-USS Lead/East Chicago Site

- 1. Please provide us with a brief, general background of the site and your roles at the site?
 - a. What type of samplings have you conducted at the site versus those done by the EPA or other agencies, and how frequently has this sampling been conducted?
 - b. Have either of you been involved with other Superfund/Hazardous Waste sites? If so, how does the communication at those sites compare to USS Lead? What are the differences?
 - c. What were the results of the samplings conducted?
 - d. Will you be involved in the 5-year reviews being conducted at this site, or will this be handled primarily by EPA?
 - e. When were human health risks discovered at the site, if any?
- 2. What types of coordination/communication efforts do you have with EPA regional staff regarding this site, and how frequently?
 - a. What is the chain of communication between ATSDR and EPA?
 - b. How early on is ATSDR involved with protecting human health?
 - c. Do you have coordination/communication efforts with any other government agencies or other parties for this site? If so, please describe.
 - d. Do you work with both the RCRA (Dupont) and Superfund program (USS Lead) at this site? If so, how do you communicate issues as they relate to both?
 - i. How does EJ (environmental justice) policy relate to the Superfund and/or RCRA program(s) that impact this community?
- 3. Who is responsible for communicating potential human health risks from this site to the local, impacted communities?
 - a. What methods of communication have been used for communicating human health risks from this site to the public, and when did they occur?
 - b. Were you in attendance/involved when EPA held presentation meetings with the public for this site? What was your role at the meeting?
 - c. How far in advance does EPA invite you to these meetings?
 - d. Who or what groups are being communicated with about potential human health risks from this site?
 - e. Have any community interest/action groups been formed for the site? Do they ask you any questions about human health risks?
- 4. Are there any policy/guidance/criteria documents being used by you or the EPA for how to conduct risk communication activities with the community for this site?
- 5. Have there been any delays or challenges in communicating potential human health risks to local, impacted communities for this site?
 - a. If so, what were the contributing causes for these delays or challenges?
 - b. In your opinion, what things went well in terms of communicating potential human health risks to impacted communities for this site?

- 6. What types of questions/concerns have you received in the past from the local communities and how did you respond?
- 7. Did you receive, or have you heard any feedback from the community, positive or negative, about how risk communication was handled for this site? If so, please describe.
 - a. Have any evaluation methods been used to determine the effectiveness of risk communication activities that took place for this site? If so, please describe these methods used.
- 8. What are the current conditions at the site?
 - a. Are there any current human health and environmental threats still present for this site?
 - b. Are there any upcoming sampling or risk communication activities scheduled to take place for this site?

ATSDR Interview —USS Lead/East Chicago Site

<u>NAME</u>	DATE	<u>Comments</u>
Prepared/Completed by: Allison Krenzien	7/31/19	
Reviewed by: Jill Trynosky	8/10/19	[x]: I reviewed this WP and found it satisfactory. (No comments were provided.) []: I reviewed this WP and found it satisfactory. I also included comments in a blue colored font. []: All comments have been resolved. Added some highlights to the text. Also put strikethrough to show the questions we did not ask – this can be done in future workpapers or don't include the questions not asked. With the questions not asked in the workpaper, it can get confusing.

<u>Purpose</u>: To interview regional staff and IWM consultants regarding the USS Lead site on current conditions, communication activities, and other related questions.

Project Guide Step #: 42

Meeting/Interview Information:

Date & Time/Duration	Meeting Location	Invitation, Agenda, Questions (If applicable)
July 2, 2019 3:30-4:30 PM (ET)	Teleconference	See Source 2

#	Name	Title/Organization Contact Inform	
2	Allison Krenzien	EPA OIG Program Analyst	30 (b) (6)
4	Jill Trynosky (JT)	EPA OIG Project Manager	20
5	Morgan Collier (MC)	EPA OIG Program Analyst	20
6	Mark Johnson (MJ)	EPA R5 SEMD Sr. Representative	Johnson.mark@epa.gov

7	Motria Caudill (MCa)	CDC ATSDR	Caudill.motria@epa.gov
8	Jack Hanley	CDC ATSDR	(b) (6) @cdc.gov
9	Louise Williams	CDC ATSDR Audit Liaison	(b) (6) @cdc.gov

Source(s):

#	Description/Title	Source Document
1	Interview Questions	Link: D.34 - [C] East Chicago Meeting with ATSDR 7.2.19 - Interview Questions for ATSDR-USS Lead-East Chicago.docx
2	Meeting Invitation	Link: D.34 - [C] East Chicago Meeting with ATSDR 7.2.19 - ATSDR_USS.Lead_Meeting.Invite.pdf

Scope: Meeting covered questions/discussion with CDC ATSDR staff about the USS Lead site in East Chicago, Indiana.

Conclusions:

- 1. Timeline (Details 1, 8.b.i, 8.b.ii, and 8.b.iii)
 - a. 1994: Site first proposed; ATSDR performed initial evaluation and released a preliminary public health assessment; site went back to RCRA
 - b. 1997: Exposure investigation performed by ATSDR
 - c. Site re-proposed later and ATSDR re-engaged in reviewing data
 - d. 2011: Second public health assessment using a health assessor, MJ/MCa were not involved
 - e. Did additional sampling during EPA's remedial design phase
 - f. 2016: Returned with new data and more extensive testing; generated exposure concerns
 - g. Worked with state health department to examine child blood lead levels and have continued to do so
 - h. 2017: Physician education sessions on evaluating patients with lead exposure
 - i. 2018: Co-authored document with CDC about blood lead levels of children in the 3 zones
 - j. Been involved in public meetings throughout
- Communication level depends on the timeframe. Beginning in 2016, communication with residents and other agencies was improved and was contentious, but they were doing outreach. (Details <u>1.c.i</u> and <u>1.c.ii</u>)
- 3. When EPA was working in the community and going door-to-door daily sometimes they would refer people to ATSDR if they had a health-related question. (Detail 2.i)
 - a. They would on-the-spot answer questions about sampling, but if there was a question about health impacts, they would call us. (<u>Detail 2.i</u>)
 - b. They would ask for input on lead communication materials. For example, if they were developing a factsheet for residents. They included information from ATSDR and CDC on basic recommendations on how to reduce exposures while waiting to be relocated/remediation. (Detail 2.ii)

- 4. Communicating human health risks to the community is a shared responsibility between federal, state, and local entities. There is no one lead communicator. (Detail 3)
- 5. EPA made extensive efforts to communicate with the public. They made efforts to be responsive to questions and people kept asking questions that we couldn't answer. There was not anything they could have done differently since the answers weren't available. (Detail 7)
- 6. The site is broken down into areas, the former housing has been demolished and they are in the process of re-zoning. At this point, that process is completed and there's no exposure since it's been removed. (Detail 8.a)
 - a. They are completing cleanup of homes in zones 2 and 3. (Detail 8.a)
 - b. Until that's completed, there are hazards present. But based on the information we have, they've been prioritized based on the magnitude of contamination. (Detail 8.a)
- 7. EPA did not have access to the same blood lead levels that ATSDR did before 2016 since they are not a health agency. (Detail 8.b.v)
- 8. EPA produced their own physician education factsheets. (Detail 8.b.vi)
- 9. They're having periodic meetings in the area currently, but not at the same frequency as back in 2016. They're working closely with city, state, and school system, there is not a specific program for educating new residents other than what can be obtained from public record and periodic meetings. (Detail 8.b.vii)

Details:

MC facilitated introductions, explained what OIG is, and described the project objective. There were no questions before beginning. MC conducted the interview. (Questions below are noted in italicized font. Bold font added to denote details supporting conclusion statements.)

1. Please provide us with a brief, general background of the site and your roles at the site?

MJ: Our involvement goes back a ways. ATSDR has statutory mandate to conduct [unsure] at Superfund sites. USS Lead is one of those. It took a long time to become one. When it was first proposed in the 80s, we began initial evaluation and released a preliminary public health assessment. It went back to RCRA at EPA and we did not have significant involvement until it was re-proposed. Then we became re-engaged in reviewing data. Issued 2nd public health assessment in 2011. Then as EPA went through remedial design phase, we did additional sampling. We came back in 2016 with new data provided, with more extensive testing, including the former housing complex. New information led to concerns about exposure and we worked with state health department to look at blood lead levels in children within the community and with EPA as extending investigation to include larger soil sampling including Zones 1, 2, 3. Over 2+ years we have been supporting work with blood lead testing with the city and state. We released a document in August 2018 on blood lead levels of children living in those zones and it was co-authored with the CDC. We've been involved in public meetings with EPA, held our own meetings, released 2018 documents, and did physician education in 2017 on evaluating patients with lead exposure.

MC: When were human health risks discovered at the site?

MJ: By us?

MC: By anyone. When was it brought to your attention?

MJ: In 2016. We were there to determine next steps for remediation.

MC: So in 2011, when you were doing the 2nd document, was there no human health risks discovered?

MJ: They had much less information. Mostly focused on Operable Unit 2 which is now a landfill. There was some sampling in residential zones, but that was less extensive.

a. What type of samplings have you conducted at the site versus those done by the EPA or other agencies, and how frequently has this sampling been conducted?

[Question not asked specifically]

- b. Have either of you been involved with other Superfund/Hazardous Waste sites? MJ: Yes, many.
 - c. If so, how does the communication at those sites compare to USS Lead? What are the differences?

MJ: It depends on the timeframe. Most recent has been very engaged. There are regular meetings with the community. In 2016-2017 there were monthly meetings that included outreach to groups organized initially in response to mayor's decision to close housing complex. That decision led to displacement of 1000 people, there was much engagement to provide information about relocation. At the same time, EPA was doing an assessment of homes in the housing complex. We were working to identify children with high blood lead levels to identify homes that could be used for relocation and prioritization. EPA also did indoor remediation also of personal items to make sure people weren't carrying contamination with them. Beginning in 2016, communication with residents and other agencies was improved and was contentious, but was doing outreach. We did "data viewer" sampling information put onto website in way that allowed privacy but could view findings and characterization. Prior to that, I can't speak to it since we weren't heavily involved.

d. What were the results of the samplings conducted?

MJ: We began in 2016 with reviewing that information. We had to go through process of requesting from state which was sent to lead program at CDC. It was provided to us in 2017. We presented information at health consultation and said we found elevated blood lead in children in housing complex from dust and soil also lower levels in the other 2 zones. No lead-based paint in homes, so that did not contribute to levels. We released that document after clearance in August 2018.

MCa: Individuals got the results promptly from their provider even though it took time to release the report? Is that correct?

MJ: That could have been their personal physician or through state/city outreach with clinics available for free clinics. So, they got results within 1-2 weeks.

e. Will you be involved in the 5-year reviews being conducted at this site, or will this be handled primarily by EPA?

MJ: Especially with this, we would be involved. We tend to be selective with which ones we're involved in. We are in the process of looking back at information collected since the last document to issue advised public health assessment that's more up to date/comprehensive.

f. When were human health risks discovered at the site, if any?

[Already asked in Q1]

2. What types of coordination/communication efforts do you have with EPA regional staff regarding this site, and how frequently?

MJ: We've been very involved. There's been the emergency response program that was initially lead for investigation of the housing complex and remedial for other areas. We were involved with both programs intensively. In part to prioritize homes for the assessment/remediation for children/elevated blood lead levels.

MCa: When EPA working in the community and going door-to-door daily sometimes they would refer people to us if they had a health-related question. They would on-the-spot answer questions about sampling, but if there was a question about health impacts, they would call us.

MJ: We participated in briefings. There were health agency conference calls including state/local/HUD with HHS, local agencies, federally-funded health agency providing mental health services. We fund a pediatric specialty unit and they provided assistance regarding questions. Involved with medical outreach efforts. Opportunities for EPA to brief other agencies.

MCa: They would ask for our input on lead communication materials. For example, if they were developing a factsheet for residents. They included information from ATSDR and CDC on basic recommendations on how to reduce exposures while waiting to be relocated/remediation.

MC: You were involved in prioritizing?

MJ: Yes, we wanted to make sure as they were considering where to begin testing, they could identify young children/elevated levels that would be first.

MC: Was high lead sampling levels part of that?

MJ: Yes, when they had that information.

a. What is the chain of communication between ATSDR and EPA?

[Question not asked specifically]

b. How early on is ATSDR involved with protecting human health?

[Question not asked specifically]

c. Do you have coordination/communication efforts with any other government agencies or other parties for this site? If so, please describe.

[Question not asked specifically. See details provided in response to questions above.]

d. Do you work with both the RCRA (Dupont) and Superfund program (USS Lead) at this site? If so, how do you communicate issues as they relate to both?

MJ: It was viewed as one investigation. Any time there was public outreach, we would have briefing about both. Since it was not residential, there was nothing specific to assess, but evidence that there is arsenic in zone 3 may be associated. But we haven't done independent assessment.

i. How does EJ (environmental justice) policy relate to the Superfund and/or RCRA program(s) that impact this community?

MJ: Nothing specific done differently. But because of community concern of at-risk children, made sure they were addressed. We saw under-testing in the community and an 11-year decline. That was a concern in the beginning when we saw less testing than should have been done given the area. We did outreach also in community groups to people with local knowledge. Calumet Coalition with help from Northwestern and other groups, schools (working to promote blood testing- event at New Carrie Gosch) to continue blood testing and make sure new residents were aware until remediation completed. Also spoke with city council.

3. Who is responsible for communicating potential human health risks from this site to the local, impacted communities?

MJ: It is shared at the federal level and with state and local agencies. It's not just one team—it is a combined effort. We all contribute.

a. What methods of communication have been used for communicating human health risks from this site to the public, and when did they occur?

[Question not asked specifically. See details in response to other questions above.]

b. Were you in attendance/involved when EPA held presentation meetings with the public for this site? What was your role at the meeting?

MJ: It depends on the objective. Early on there was a structured with agenda where we hired a consultant to help organize the content. We would meet with locals to make sure topics to be covered were ones that people wanted to hear about. Based on that feedback, we would organize meetings. The style varied from a formal presentation to later on focusing on remediation and we served on a panel if there were any health questions.

MC: How did your individual meetings differ?

MJ: We would hold them when we wanted to share health information specifically. For example, when the study was released. EPA was there, but it was our meeting to communicate findings.

c. How far in advance does EPA invite you to these meetings? Do they want input?

MJ: We have a standing invitation to their meetings. In 2016-2017, we would have regular meetings with them as they were planning for remediation so we were aware of topics and could be prepared for questions.

d. Who or what groups are being communicated with about potential human health risks from this site?

[Question not asked specifically]

e. Have any community interest/action groups been formed for the site? Do they ask you any questions about human health risks?

[Question not asked specifically. Question also geared more to EPA's role]

4. Are there any policy/guidance/criteria documents being used by you or the EPA for how to conduct risk communication activities with the community for this site?

MJ: We have general risk communication guidance that is used as a framework. Much of that is shared with EPA. Our guidance tends to focus on health communication/data and privacy issues, especially since involved with blood testing protected privacy. We do have guidance that any materials we disseminate would go though clearance process through CDC headquarters and prepare talking points to use in interactions with the public and media. There is a lot of political interest, and we participated in briefings with them as well.

5. Have there been any delays or challenges in communicating potential human health risks to local, impacted communities for this site?

MJ: I mentioned the preparation of the assessment did take time in part because of the effort to collect data and it went beyond typical display of information. We wanted to get down to the area of the city where people were exposed. It required more refinement and going back to primary data. So, there was a data cleaning process to make that happen. Lead is a complicated issue that requires more scrutiny of documents; and because of complications, it took longer than people would have liked.

a. If so, what were the contributing causes for these delays or challenges?

[Question not asked specifically]

b. In your opinion, what things went well in terms of communicating potential human health risks to impacted communities for this site?

MJ: I think in the end, our finding did confirm what people believed to be the case: if people lived in the housing complex, they were at risk. We can say what exposure was at the time given

the measurements from 2005-2015. What they were in the past which people wanted to know, we couldn't characterize, but it might have been higher. It gave people information that we had looked at to give answers. The frustration was about the things that we couldn't answer.

6. What types of questions/concerns have you received in the past from the local communities and how did you respond?

MC: You mentioned that EPA, if they were first person to talk to someone, that they would pass it to you. What kinds of things have been referred to you?

MJ: Things we have been hearing have been related to health impacts from exposure—particularly from past. People are saying that they played there as children and had no warnings. This was falling on the coattails of Flint and people were feeling that there should be a registry of people living there and there should be surveillance. Those are not resources we can provide. We did make sure that if people had health concerns/medical needs that they were connected to resources and had the right information about risks and to support that effort. Those were some expectations to address past exposures, but they are beyond our agency to address.

7. Did you receive, or have you heard any feedback from the community, positive or negative, about how risk communication was handled for this site? If so, please describe.

MJ: In my experience, I think this is one case where they made extensive efforts to communicate with the public. They did make efforts to be responsive to questions and people kept asking questions that we couldn't answer. There was not anything they could have done differently since the answers weren't available.

MJ: When you're dealing with a community that's been stressed and not listened to (as they feel they have), there's lots of emotion which is why meetings could be volatile. But we felt they needed to happen and to find ways to address them. Another aspect to make sure of was lead exposure may not be solely related to soil. We worked with state with funds from HUD/EPA with local funds where homeowners could apply for grants to assess their indoor environment and if it was found to be contaminated to then do lead abatement. So we could address all lead in homes.

MC: How will the new changes in lead standards effect things?

MJ: We don't know, it's on-going. It's something for EPA to respond to.

a. Have any evaluation methods been used to determine the effectiveness of risk communication activities that took place for this site? If so, please describe these methods used.

MJ: We've not requested resources to objectively look at communication. They may exist, but we haven't used them here.

8. What are the current conditions at the site?

[Question not asked specifically]

a. Are there any current human health and environmental threats still present for this site?

MJ: The site is broken down into areas, the former housing has been demolished and they are in the process of rezoning. At this point, that process is completed and there's no exposure since it's been removed. They are completing cleanup of homes in zones 2 and 3. Until that's completed, there are hazards present. But based on the information we have, they've been prioritized based on the magnitude of contamination.

b. Are there any upcoming sampling or risk communication activities scheduled to take place for this site?

MJ: Blood testing wasn't with the EPA. It was the state/city only. We need to check on that. The city maintains a registry, so we'll check with them to see the current status to make sure there's adequate case management. Due to poor resources, cases hadn't been followed up with. State has been helping. There is follow-up testing to make sure remediation has been helping.

MC: Who's the contact for state health?

MJ: Paul Crevins.

MC: If aware of EPA's upcoming meeting, will you be a part of it?

MJ: We're not aware of one, but I'm assuming they'll invite us.

MCa: We have also talked about attending Calumet Days in July.

JT: Talking about registry and surveillance—you said "ATSDR can't provide". Why?

MJ: The request was made in Flint, too. Funds were provided for Michigan to do a registry for that. That was a special appropriation. It is not ATSDR's responsibility. Our job is to evaluate and assess hazard and make recommendations. We don't have the ability to institute a registry for exposure.

JT: The 2018 report that is on the history of child blood lead levels says "update for East Chicago residents". What was the report prior to that update?

MJ: I'm trying to picture the front page...

JT: It's the August 2018 report.

MJ: That's the most recent one. I mentioned 2011 which was public health assessment which we no longer support. One in the 1980s was the initial one.

MCa: There was also an exposure investigation in 2007, I think. That's where we directly take a role in collecting data. In that case, there were specialists organizing a sampling event.

MJ: That was 1997 which was follow up to 1994 not the 1980s. This is in consultation with the state.

JT: At the beginning we were asking when the high resident risk occurred. I though I heard 2016.

MJ: That's when we became aware of the magnitude of the problem in the area. But it existed for decades.

JT: So you did reports in 1994, 1997, 2011, 2016, 2018?

MJ: The limitation is what's available to review. We didn't have complete information.

JT: Complete information about the soil?

MJ: Yes, USS lead site had been the focus which is away from residential. The off-site information wasn't available until 2016. Particularly for the housing complex.

JT: What was different then?

MJ: The number of samples and their geographic coverage. Before that it was just a few samples across sites. So the magnitude was expanded which showed how many homes were effected.

JT: When was 2016 data collected?

MJ: I believe in the previous year: 2015-early 2016. It would be in EPA's records.

JT: So the August 2018 report was the most recent for ATSDR. Some of those other findings I'm looking at were between 2005-2015. But it wasn't until 2016 that the concern was brought to ATSDR. Did you or the EPA go back in 2015 and get 2005 data?

MJ: Yes, in 2016 we re-engaged and worked with state to look back as far as they could in their records. 2005 was first year with electronic submissions. Took that to full year which would have been 2015.

JT: Is it correct to say that it could have existed before then? The exposure and the risk?

MJ: Sure. And clearly did.

JT: How early has EPA provided data to show that the risk existed?

MJ: Risk was always there since contamination for 50-60 years of industrial in area. But it was not until the data was analyzed that we were aware of it.

MCa: EPA doesn't have access to that data. When we were working with state in 2016-2017, we had access as health agency, but EPA didn't have it beforehand.

MJ: The level of refinement used for this went beyond what they would do for high-risk communities. Usually they do analysis by county or zip code. Even state health department doesn't do active surveillance to identify sources.

MCa: Not only is it specificity, they weren't aware of it. They look at it on the census level which wouldn't have shown it. The action for lead levels is greater than 10 in blood and our report is in comparing different zones of the % above not 10 but 5.

MJ: That standard changed in 2012. So, the threshold of concern was reduced over time.

JT: So the 2011 report didn't look at 2011 or 2010?

MJ: They did summarize the level but was over entire city of East Chicago, not at the neighborhood specifically. The city data suggested a decline, but this neighborhood specifically wasn't declining and that information wasn't revealed when looking at the data only on the city level.

JT: Was there anything that could have been done differently to have discovered the risk earlier?

MCa: That's our work. It's not something that EPA could or should have done.

JT: Based on the public health assessment, it sounds like a broader scope of data was looked at and had it been more specific/targeted, then the blood levels would not have been overlooked.

MJ: We looked at the data, had that same data set been looked at 5 years earlier, they would have reached the same conclusion. But there was no reason to do that earlier. So it could have been done differently.

JT: Is there anything other than a more specific area?

MJ: That's how we came to that. Rather than going at an entire city/zip code to find an area of contamination. We knew the magnitude in residential areas which allowed us to do that and not all of it was available in 2011. So, they did what they could with what they had which was at the city level. You act on what's available to you at the time and that's not always complete.

JT: Is it common to change the public health assessment or to have one published and then to correct or re-do the assessment.

MJ: It happens from time to time. I don't think it's very common. But as new information becomes available we look at it and see if we need to add conclusions/recommendations with new information. But in this case, it was broad statement that with new information we no longer support.

JT: Has ATSDR worked on arsenic?

MJ: Yes, in most places it's co-located. As they are doing remediation, it would also remove arsenic. There are some with only arsenic.

JT: Is there some named Susan Buchanan?

MJ: Not with ATSDR. She is faculty at the University of Illinois, School of Public Health. She's a physician, given funding by EPA and ATSDR to support programs. She's involved with the physician education efforts.

JT: Is she still involved?

MJ: Yes. Usually we ask her to be involved when there's a public meeting to answer medical questions. Her involvement is as-needed. We have referred people to her when they have something with a medical opinion needed.

JT: She's involved with ATSDR and EPA?

MJ: She's not government. We provide funding to them.

JT: And EPA does as well?

MJ: The whole national program is managed by us with EPA funds to support their work with communities.

JT: So Susan and school of public health, does their involvement start in 2016 also?

MJ: Yes, when we started looking at it we engaged with them. They have their own factsheets for physician education.

JT: You talked about Calumet Days. Have you ever been to one in the past?

MJ: I think I went to the first one but not last year.

JT: So, first was in 2016?

MJ: I'd have to look in my notes. They also have events at Riley Park where we've had blood testing events.

JT: So, to confirm, the involvement began in 2016 even though some involvement began in 2011 and there was some data available before that.

MJ: Yes, the 2011 document was prepared by a health assessor in Atlanta (CDC) and we didn't have involvement. When sites come to us, it gets assigned to an individual and it was assigned to that person. So it wasn't until May 2016 when EPA R5 came to us about soil contamination that we became involved in this regional office.

JT: Any other information you'd like to share?

MJ: I mentioned the health calls with agencies, one of the groups we felt was important was USDA's food and nutrition who provides money for school lunch/food banks to ensure appropriate nutrition to prevent absorption of lead. So good nutrition to combat the severity of lead exposure. That was an important partner and they attended public meetings as well. From the health side, we had good collaboration to support these efforts.

MC: Are there any resources for new people to the area?

MJ: I don't know how it's being handled. They're having periodic meetings, but not the same frequency. They're working closely with city, state, school system. I'm not aware of a specific program other than what can obtain from public record and periodic meetings.

WP Subject Line: 4/10/19 OEM East Chicago USS Lead Community Involvement Coordinator Interview

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Bo Park	5/31/19	
Reviewed by: Jill Trynosky	8/9/19	 [x]: I reviewed this WP and found it satisfactory. (No comments were provided.) []: I reviewed this WP and found it satisfactory. I also included comments in a blue colored font. []: All comments have been resolved. Checked and changed spelling of "Calumet" in some areas of the wp. Make sure to take a minute to run spell check before finalizing. Also check for the letter "u" and replace with "you".
Edited by:	MC 3/25/2021	Added conclusion 14

<u>Purpose</u>: For each selected site, interview the site's community involvement coordinators (CICs) to get their opinions on the current conditions, to determine the cause of any apparent delays or lacking communication and/or answer any other questions that arise.

Project Guide Step #: 42

Source(s):

Meeting/Interview Information:

Date & Time/Duration	Meeting Location	Invitation
4/10/19, 2PM – 3PM	Call-In number 202-991-0477; conference ID (b) (6)	Link: D.17a - [C] OEM East Chicago CIC Interview 4.10.19 - Source 1 E Chicago CIC Mtg Invite.pdf

#	Name	Title/Organization	Contact Information
1	Morgan Collier	EPA OIG Pathways Intern/Program Analyst	202-(b) (6)
2	Bo Park	EPA OIG Program Analyst	215-
3	Jill Trynosky	EPA OIG Project Manager	202-
4	Janet Pope	EPA Region 5 Community Involvement Coordinator	(312

Scope: Link: Link: Link: Link: INDEX

This workpaper is to document the interview with the community involvement coordinators (CICs) in Region 5 to get their opinions on the current conditions at the OEM East Chicago site, to determine the cause of any apparent delays or lacking communication and/or answer any other questions that arise about this site to answer the objective for this audit assignment [Communication of Human Health Risk at Sites in OLEM Programs OA&E-FY19-0031]. The interview was held on April 4, 2019.

Summary:

- 1. CIC stated they do not delay anything in terms of communication (Details 16a) and received lots of positive feedback from the community (Details 20)
- 2. Measures communication effectiveness from verbal responses from community (Details 11d, 17b) or by measuring public participation (Details 17c)
- CICs sent mails, newsletters, held public meetings, open houses, neighborhood events, health fairs, blood drives, workshops, health fairs, attended local festivals, had office set up in community (Details 11i, 12b, 13b, 19d, 22d)
- 4. CICs use newspaper ads, mailing list, community groups, web page to get the word out on meetings (Details 17e)
- 5. OSC, RPM, CICs responsible for communication with public at site (Details 4)
 - a. CICs got involved in 2006; role: knock on doors, get access agreements, share sampling results with OSC, in charge of communicating with public in a way they can understand (Details 2a, 3a)
- 6. CIP first done in 2011, redone in 2018 because community changed drastically (Details 13f)
- 7. CICs keep 2 binders with everything they've handed out to the public in hard copy form (Details 15a)
- 8. CIC does not know how and when EPA discovered human health risk at site (Details 8a, 54-57); residents think EPA discovered risk in 1985 but unclear when exactly (Details 58-68)
- 9. Currently, "at this site, there are no risk for releases. There's lead and arsenic in soils. They take measures that no dust releases into the air," long-term risks only (Details 10d, 22b)
- 10. CICs shared EPA document on risk assessment but mostly left it up to ATSDR or more technical staff (Details 11a)
- 11. Community interest groups: 1. Calumet Lives Matter, 2. Community Strategy Group, 3. East Chicago Calumet Coalition (Details 12e)
- 12. After mayor decided to relocate the housing complex, site became very visible and people were asking about the Regional Administrator so he prioritized the site (Details 48, 49)
- 13. Former administrator Pruitt, Cal (Special Advisor) also involved (Details 51-53)
- 14. The EPA Community Involvement Coordinators (CICs) delivered information that addressed community concerns (See Details 3a, 12c, 28). <u>Link: Chapter 2.docx</u>

<u>Details of the Meeting/Interview</u>:

1. Morgan led the meeting by stating the project objective and scope. Explained that OIG selected 8 sites to look at. USS Lead was one of the sites EPA suggested. Gave an overview of work completed thus far and future activities to be conducted

Interview Questions with Site CICs (USS Lead/East Chicago)

- 2. Please provide us with a brief, general background of the site.
 - a. Janet: site is in East Chicago, Indiana 30 min from Chicago. USS Lead site. EJ community. Divided into 2 operable units: residential cleanup, facility cleanup and GW investigation. I started in community involvement in 2006. Going out to knock on doors to access yards to sample. Once access granted, we sampled, and we did some emergency removals at the time. They gave it to us and me and OSC went to homeowner's house. OSC and I shared results. Link: PSSC-USS Lead East Chicago Draft Memo.docx
- 3. What was/is EPA's role and activities for this site, if any, versus other parties regarding communicating risks to the impacted community?
 - a. Janet: EPA was the lead, yes, my role was the CIC role. I was in charge of residents communicating info that they could understand it. EJ community. People were not very educated on who EPA was. We had to explain and go out to explain the function of the Agency, and introduce myself and what my work was. My role was to explain why we were out there, what we're doing and how we were going to do it. Link: PSSC-USS Lead-East Chicago Listening Session.docx
 - b. Morgan: because it was an EJ community, did you have to adjust the communication?
 - c. Charles: there was a significant Hispanic community so they brought me on board. I speak Spanish so I became involved. We go talk to residents, translate, everything we produced is in Spanish. <u>Link: Chapter 2.docx</u>
 - d. Janet: we always had a translator on board with contractor.
- 4. Who is responsible for communicating with the public at this site?
 - a. Janet: OSC, RPM and myself
- 5. Who oversees the work at this site?
 - a. Charles: RPMs usually
- 6. What was/is your role and activities for this site, if any?
 - **a.** Auditor's note: explained above
- 7. Were there any issues in ensuring consistent messaging to the community by you and other agencies if working together? If, so please describe them.
 - a. Janet: I don't think so. No one ever voiced that to us. We had an office out there in community. We had to adjust and give them things and do things different.
- 8. How and when did EPA discover the human health risk at the site, if any (i.e. via sampling, third party, other health indicators, etc.)?
 - a. Janet: I don't know
- 9. How and when did EPA communicate human health risks to the community, if any?
 - a. Who communicated the human health risk and who was involved in this risk communication?
 - **b.** Morgan: you, Charles, OSC, anybody else?

- c. Charles: sometimes ATSDR would chime in. If we get lot of health risk questions like side effects of lead, arsenic. Sometimes we refer them to ATSDR.
- d. Janet: we had a multi-agency open house with state, local, federal health depts. Came to talk to residents about health.
- e. Morgan: how do you combine ATSDR recommendations on messaging? Consistent messaging?
- f. Charles: the fact sheet we produce, we run them by ATSDR for input/add to it
- 10. What is the general chain of communication within EPA internally for when a release or contamination happens at a site? Is this a standard process or site dependent?
 - a. Charles: what do you mean by release?
 - b. Morgan: release or contamination
 - c. Janet: we have a spill hotline. They check that daily. If any emergency comes up, usually requests CIC at the time and we work together then.
 - d. Charles: at this site, there are no risk for releases. There's lead and arsenic in soils. They take measures that no dust releases into the air.
- 11. Who or what groups did you communicate with about risks at this site? How did you determine who to communicate with? How do you determine whether the risk information is understood by the community?
 - a. Janet: we did share EPA document on risk assessment. Easy to understand 1-page pamphlet describing risk and showing graphics. Mostly left up to ATSDR or more technical staff though.
 - b. Charles: we always ensure our materials all of them are basic reading level that anybody can understand.
 - c. Jill: what indicates they either understand/don't understand?
 - d. Janet: they told us straight up "we don't understand that." There straight up at this community. And you see the looks on their faces in the meetings. And when we go to their houses, we give them the CIP. They tell us early on to "tone it down a little bit, we don't understand it." They were vocal about telling us what they didn't understand.
 - e. Jill: at what point?
 - f. Janet: early in the process. We even did color coding and they understood that very well. They let us know. This was 2006?
 - g. Jill: color coding?
 - h. Janet: Making changes to documents. 2006-2007 in that area
 - i. Charles: we communicated with the community at large sent mails, public mtgs, open houses, events in neighborhood, local festival attend- few local community groups had email lists. Invited to our events. Any questions- they call or email us. We determine who we communicate with based on geography and to key stakeholders not living at site but are interest, and the local government
- 12. What methods of communication were used (if not previously stated)?
 - a. Morgan: you mentioned door to door interactions and presentations
 - b. Charles: many public mtgs usually include presentation, special comment period sometimes & open houses/availability sessions, blood drives, workshops

- c. Janet: Workshops talking about different tools community could use to understand stuff.
- d. Were any community interest groups formed?
- e. Janet: there's 3 1. Calumet lives matter 2. Community strategy group 3. E. Chicago Calumet Coalition
- f. Morgan: what's the difference?
- g. Janet: Calumet Lives Matter focuses on zone 2. Coalition claim most residents in zone 3. Strategy group- care about environmental issues all over the area.

13. Were any surveys used?

- a. Charles: CIP had questions used to interview the community
- b. Janet: our first CIP created in 2011 and we went around door to door. We had an office set up in the middle of the community with tools there
- c. Jill: which staff was available for walk-in questions?
- d. Janet: CIC mostly me and contractor. RPM would come couple days a week.
- e. Jill: CIP first done in 2011 but why re-done in 2017?
- f. Janet: second one was in 2018. From 2011 to 2018, people in community changed drastically. New people didn't understand and we had to constantly re-educate. When they started getting more knowledgeable, they asked if we were going to update the CIP. There were different ideas and more younger people moving in. Not into old stuff- we had to adjust.
- 14. What specific program criteria and/or EPA guidance did you use for risk communication activities for this site? (i.e. internal guidance/policy/procedures documents) Did you use any criteria or guidance from outside the EPA?
 - a. Charles: we do have CI Toolkit. Written materials are online.
 - b. Did they reference the Superfund Community Involvement Handbook at all? If so, which parts or sections were used?
 - c. Janet: that's kind of the same thing.
 - d. Morgan: Any specific sections you reference? -Morgan
 - e. Charles: we'll follow up with you on that
- 15. What documentation or records were kept related to (1) sampling or identification of human health risks and (2) risk communication activities for this site?
 - a. Janet: We don't keep sampling records but there's map viewer I think with sampling results. I do keep every piece of communication with community I have 2 binders with everything I've ever handed out. Hard copies.
- 16. Were there any delays in communication or times when the risk was not communicated to the impacted community for this site?
 - a. Janet: we don't delay anything. As soon as we find out anything, we go out and tell them.
- 17. How did you measure the effectiveness and timeliness of risk communication for this site, if at all? What tools, if any, were utilized to do so?
 - a. Charles: community outreach is hard to measure
 - b. Janet: a lot of times community tells our supervisors that we are excellent. As far as us measuring- we try to get the work done.

- c. Charles: we can kind of gauge it by people who show up. If meeting is chock full of people, you're doing something wrong. If not many, it's good. Less # of people come over time. More yards cleanup, stop coming. Because their yard is done and cleaned up and satisfied.
- d. Morgan: how do you get the word out about meetings?
- e. Charles: several things. Place ads in newspaper. Spanish. Send out people in mailing list. Community groups ask people to tell people. Post it on web page.
- 18. What other challenges did you face in terms of risk communication for this site, if any?
 - a. Janet: probably the biggest challenge is the lack of trust in the government. We hear that a lot. As far as us doing our work, people know we make ourselves available through web page, office right at site, hotline. They trust us. There are certain things they don't trust but they know we're there and can give them answers and respect.
 - b. Charles: 1 challenge example: we sample front and back yard. Sometimes clean up front OR back yard. How to explain to residents why front yard is not being done but next door neighbor's front yard is being done? Hard for people to accept why we do the things we do.
- 19. What are some other good practices or things that went well in terms of communicating potential risks to the impacted community that occurred for this site, if any?
 - a. Janet: health fairs, we attend, annual day, us bringing it to them and coming to their part of the community. Particularly worked well for us. Bc we have presence out there
 - b. Charles: community gets to know us. Familiar faces
 - c. Morgan: health fairs?
 - d. Charles: goal for health agencies=children tested for blood lead more. Historically couldn't get enough people to get kids tested. We organized health fair event, closed portion of block, testing van, free food & drinks. Games. Successful. Chilly day but lot of people showed and got lots of kids tested.
- 20. Did you receive any feedback from the community, positive or negative, about how risk communication was handled for this site? If so, please describe what feedback you received and how?
 - a. Janet: positive: our site team, whole team, have been really great. RPM, OSC, CIC, ATSDR, regional acting admin, Bob town hall 1:1. 2017-every month had meeting and different topic. Whatever they requested. We did them next month. We go extra mile
 - b. Charles: ground team, general good feedback. If it's negative- it's about broader EPA policies.
 - c. Janet: negative stuff is not directed to us locally but us pointing them to right info. Political year out there- political arena has really blown up, for some reason, the candidates are looking at EPA as central focal point.
- 21. Is there anything you would have done differently over the period of time working at the site? Why or why not?
 - a. Janet: we put big signs in yard- before mulching the yard- don't play in dirt. Every time we look at an ad, I see those big signs. Honestly, I look back, I shouldn't have done that bc this sign is everywhere. What more could we have done? I asked them. They said nothing. So I don't know.
- 22. What are the current conditions at the site in terms of:

- a. Current human health and environmental threats, if any?
- b. Charles: just soil lead and arsenic in residential properties but they're long term risks.
- c. Current risk communication activities taking place with the impacted community, if any?
- d. Charles: yes, we just produced newsletter we will be distributing to residents.
- e. Morgan: we'll request a copy
- 23. At any time, did you reach out to any external experts or other agencies for support? If so, please further describe the interaction that took place.
 - a. Charles: ATSDR
 - Janet- Indiana Dept. of Environmental Management. Meeting re. lead in drinking water,
 RCRA LCD re. DuPont site- to give us presentation bc DuPont site right next to USS
 Lead; we had faucet how to put on filter and how to put that on.
 - c. Charles: request local gov't to also come to our open houses, they rarely do.
 - d. Morgan: Local government give any feedback?
 - e. ?: Council staff did if residents ask questions
- 24. Are there any other internal EPA staff or external stakeholders that you believe we should speak with? If so, who?
 - a. Janet/Charles: no
- 25. Bo: from the time you receive access from residents to sample their yards to actual sampling, what is the timeframe?
- 26. Janet: usually about a week
- 27. Bo what about sampling to sampling results?
- 28. Janet 3-4 weeks until we mail out the letters. We changed it to calling the residents with preliminary results as soon as possible over the phone and then when the results get validated, we tell them in-person.
- 29. Morgan why was the policy changed to call the residents with preliminary residents?
- 30. Janet Flint water crisis prompted it
- 31. Jill is the policy written anywhere?
- 32. Janet no highly doubt it
- 33. Jill communicated via email or memo?
- 34. Janet no just passed down to us by word of mouth
- 35. Jill asked about their binder
- 36. Janet- if you want it, will take couple weeks to scan.. A lot of these flyers and materials are at USS Lead site we will send you link
- 37. Charles-if you want complete collection we can scan and copy...
- 38. Jill- we can look at examples on line and see if they're representative of binder
- 39. Jill-community mtgs held where?
- 40. Charles-have them within community we tried former school after zone 1 was evacuated. Riley Park in zone 3. Local library near site- Patrick? Enterprise Academy- another school.
- 41. Jill-mentioned evacuation decision of mayor to relocate housing complex- how did that impact your communication strategy?
- 42. Charles- definitely a lot be we started getting a lot of phone calls and visits from residents in zone 1. Volume of information exchanged exploded.
- 43. Janet-yeah info -we had to get more info- we had relocation, relocation packages, relocation brochure

- 44. Charles-removal prog decided to do indoor sampling at complex so we had to do door to door.
- 45. Jill-factors that caused RA to become personally involved?
- 46. Janet- Bob Kathleen-we would have weekly mtgs & report him what was going on and community would ask about RA. We let Bob know they were asking. Bob said no problem, set it up.
- 47. Jill-not typical to brief RA weekly
- 48. Charles- after relocation of zone 1, we became very visible and high priority so weekly meeting w/RA
- 49. Janet-He wanted to know and very interested. We kept him in the loop.
- 50. Jill-was there any one from EPA HQ OLEM or EPA administrator's office or Public Affairs involved?
- 51. Charles-yes- former admin Scott Pruitt met with residents. Cal? Special advisor attended quite a few meetings
- 52. Jill-was there any particular outcome of that involvement?
- 53. Charles-well I think Cal said good job.
- 54. Jill-want to clarify- Morgan was asking about when EPA discovered risk at this site and what I received was that you were not aware
- 55. Janet- I learned around the same time everyone else learned risk.
- 56. Jill- is that typical for CIC to not know when EPA discovers risk?
- 57. Charles- technical side is 1st to know
- 58. Jill- now do you have understanding of the point of when they discovered risk? Could you tell us or residents if they asked you, "Janet, when did EPA discover that there was risk at site?"
- 59. Janet-1985 residents think that it was then. Don't think it was high risk until 2016. Not sure.
- 60. Jill-when you first went out there in 2006, if the risk was not high, I'm wondering why office was located and all work was invested at the site?
- 61. Charles-focusing on whole site or zone 1?
- 62. Jill-focusing on where community involvement work was done. Majority in zone 1?
- 63. Janet-lot in zone 1 but on 2,3 as well
- 64. Janet- it was all over the place in 2006. Mostly 1 and 2 I think.
- 65. Jill- the high risk became known in 2016?
- 66. Janet-ves
- 67. Jill-based on timeline we've seen, there was certainly communication going on
- 68. Janet-when I look at info they were going out there even before 2006. Instead of testing hot spots, they tested the whole area I believe. Started with hot spots first then emergency removals. Then I guess, I don't know, they did whole complex.
- 69. Jill-wanted to get better understanding of when info is shared by CIC and getting sense of timeline of risk and involvement. We talked to some folks at the site and may follow up with you. Thank you for overview.

^{*}Meeting adjourned*

WP Subject Line: 4/4/19 OEM East Chicago USS Lead Removal Team Interview

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Bo Park	4/29/19	
Reviewed by: Jill Trynosky	5/21/19	[x]: I reviewed this WP and found it satisfactory. (No comments were provided.) []: I reviewed this WP and found it satisfactory. I also included comments in a blue colored font. []: All comments have been resolved.
Edited by:		

<u>Purpose</u>: For each selected site, interview the site's removal team to get their opinions on the current conditions, to determine the cause of any apparent delays or lacking communication and/or answer any other questions that arise.

Project Guide Step #: 42

Source(s):

Meeting/Interview Information:

Date & Time/Duration	Meeting Location	Invitation
4/4/19, 11AM – 12PM	conference ID (b) (6)	<u>Link:</u> D.17 - [C] OEM East Chicago Lead Removal Team Interview - Source #1 Meeting Invite.pdf

#	Name	Title/Organization	Contact Information
1	Morgan Collier	EPA OIG Pathways Intern/Program Analyst	²⁰²⁻ (b) (6)
2	Bo Park	EPA OIG Program Analyst	215-
3	Alisha Chugh	EPA OIG Program Analyst	202-
4	Jill Trynosky	EPA OIG Project Manager	202-
5	Tina Lovingood	EPA OIG LCWM Director	202-
6	Brad Benning	R5 On-Scene Coordinator	(312
7	Keith Fusinski	Toxicologist	(734
8	Jacob Hassan	R5 On-Scene Coordinator	(312
9	Jim (James) Mitchell	R5 On-Scene Coordinator	(312

Scope: Link: Link: INDEX

This workpaper is to document the interview with the removal team in Region 5 to get their opinions on the current conditions at the OEM East Chicago site, to determine the cause of any apparent delays or lacking communication and/or answer any other questions that arise about this site to answer the objective for this audit assignment [Communication of Human Health Risk at Sites in OLEM Programs OA&E-FY19-0031]. The interview was held on April 4, 2019.

Summary:

1. Timeline:

- a. 1920-1985 site operated as primary lead smelter (Details 4a)
- b. 2006 sampling done/Superfund involvement (Details 2)
 - i. Sampling done by EPA remedial team & PRP contractors (Details 6a)
- c. August 2006 EPA offered indoor cleaning operations inside homes (Details 4a)
- d. 2009 site put on NPL due to contaminated soils (lead & arsenic) in zone 1 &2 (Details 2, 6a)
- e. 2009 & 2012 sampling at property at emergency level (Details 11h, 11i)
- f. June 2016 OEM and removal team got involved with site (Details 2, 17c)
 - i. Removal team and Regional Administrator did a walk through the community and saw exposed soil in residential areas (Details 11e)
 - ii. The trigger for removal team getting involved: following plans already in place by PRPs with EPA oversight. Removal team was just building on information from remedial and because of potential tracking, removal team was offering to clean homes (Details 17p). It was not triggered by sampling results (17j)
- g. Mayor decided to evacuate housing complex (Details 11e)

2. EPA risk communications activities:

- a. Keith, toxicologist, developed letters explaining sampling results and partnered with different agencies including ATSDR (Details 5a, 7d, 15b)
- b. Relocation branch put in place at site with community involvement coordinators working there. Hotlines made available (Details 7a)
- Had ombudsman with community primary contact. Held public meetings and worked with churches. Participation in TAG meetings, community events, blood lead testing fairs (Details 7b, 14e)
- d. Worked with East Chicago Housing & Urban Development to relocate residents from housing complex (Details 10b, 11e)
- e. Community Involvement Plan developed twice (Details 15a)
- f. Majority of communication is documented in web viewer (Details 16a)
- g. Verbally report preliminary results prior to getting validated to give information ASAP (Details 17c,d)
- h. No specific timeliness metrics used for risk communication activities (Details 17g,h) but emphasized being integrated into the community (Details 17e) and keeping track of how many homes were being cleaned (Details 17e)

Details of the Meeting/Interview:

- 1. Morgan led/began interview by stating the project objective and work completed/underway: looking at 4 programs (RCRA, OSRTI, UST, OEM), in-depth site reviews at 2 sites per program for a total of 8 sites, talked to HQ and regional staff, now talking to the 8 selected sites, request documents, then decide whether to go on a site visit.
- 2. Jim: OEM became involved with E. Chicago site in June 2016 but site was put on NPL in 2009 with sampling done prior to 2006. Lots of communication and efforts done back then. Is your scope looking at removal and not remedial? Or are you also looking at remedial which was before removal? There is a USS Lead site community outreach timeline on how EPA was communicating to the community. Happy to share that if that could help you get organized on what was developed and what happened historically beginning from January 2006 (Superfund involvement) to continuation of the project in 2018.
- 3. Morgan: we will request that information in a follow up email after this interview and we will be looking at both remedial and removal

Interview Questions

- 4. Please provide us with a brief, general background of the site.
 - a. Jim: I am an OSC for EPA. I was requested to lead residential house cleaning activities in zone 1 in August 2006. Background of site: focused on US smelter lead in E Chicago. Operated as primary lead smelter from 1920-1985. Generated by wind, soil transportation activities. Contaminations = lead and arsenic. Black furnace spread to adjacent wetland. Site got listed on NPL in 2009. Split into 3 zones 1,2,3. We're involved in removal activities. Additional samples done by remedial team and found high levels of lead in zone 1 area. R5 management decided to deploy removal program in ICS structure to offer indoor cleaning operations inside homes. That was initiated in 2006 August. I was the principle manager. Organizational chart shows- we can provide- nice background how we interacted with communities especially regarding risk communication.
- 5. What was/is EPA's role and activities for this site, if any, versus other parties regarding communicating risks to the impacted community?
 - a. Jim: Keith, our principle toxicologist, developed risk numbers and did risk communication with letters with sampling results. Worked with ASTDR. Assisted East Chicago Health Department, CDC, PISHU, R5 Children's Health Dept., etc. Quite a wealth that supported us and built us into a response structure
- 6. Who is responsible for sampling and identifying human health risks at this site?
 - a. Jim: sampling began in 2006. Contaminated soils in zone 1 and 2 led to listing of site in 2009. That led to agreements with PRPs to clean up properties. Specifically in zone 1. Higher lead and arsenic concentrations in sampling. Both remedial program and contractors did sampling. Objective for zone 1 we offered 332 cleanup residential properties in E. Chicago housing complex. Within that zone, we sampled indoor dust=trigger cleaning. Once completed, we did testing to measure target indoor concentration to evaluate how good of a clean we did. To give reassurance to residents. We did a decent job of cleaning home.

- 7. Who is responsible for communicating with the public at this site?
 - a. EPA (??) Quite a bit of individuals. Organization chart shows remedial team doing community coordinations and sending letters, knocking on doors with sample results in soils in property. Remedial program focused on characterization and providing info to PRPs. We did it for zone 1. We put together relocation branch. Relocation TAP force to knock on doors w/ what we are offering them. Community involvement coordinations worked through relocation branch. People manning hotlines.
 - b. Jacob: during zone 1 removal activities in October and in zone 3 early November, we piggy backed w/ Jim's activities. Over the winter, we developed community outreach plan w/ community mtgs through community involvement coordinators. Having ombudsman with community primary contact. We also had several public meetings, attended TAG mtgs, community events, supported community outreach events hosted by communities.
 - c. Jill: I want to confirm, there were a couple different actors including EPA with the responsibility of communication at site. But EPA was the lead role in that? Correct?
 - d. EPA (??) Depends on what we're communicating, indoor dust sampling, status of sampling of homes, which are done by EPA OSCs.. when preliminary results are received, we call the residents. When data is validated by lab, we generate letters. For example, for indoor dust, what those levels are and what they mean from a risk perspective. Keith and ATSDR put together the letters and call to give results. For any follow up questions, they follow up with Keith or ATSDR. The final follow up with letters are hand delivered with OSC signatures.

8. Who oversees the work at this site?

- a. Jim: I was the lead. Jacob mentioned that we developed decision document action memo. Fund-lead perspective. Dirt in residential properties. Jacob & Dan Hagg for zone
 2. Remedial took lead and excavation Tim Drexler & Sarah. Metrics in zone 2,3 reported to management and HQ. We developed situation reports every 3 days. You can have access to them along with addresses, status of clean up, communication issues, any ongoing issues w/ residents.
- 9. What was/is your role and activities for this site, if any? [Auditor's note: addressed roles/activities above]
- 10. Were there any issues in ensuring consistent messaging to the community by you and other agencies if working together? If, so please describe them. (Note: For the CSX Site, there was a unified command (U.S. EPA, CSX Company, & WVEDP); other agencies were also involved-NOAA, U.S. Fish & Wildlife, etc.)
 - a. Jacob?: We were good at communication from EPA to residents. Issues may have been with partner agencies that we may have to correct. Or issue other statements. From what I recall, it was early on and we fixed them early on. After direct conversations we would have, we were able to correct those early on.
 - b. Jim: When total relocation was announced, that caused concern and anxiety, how that process was being communicated, they would come to us. Bc we were so involved. But that wasn't our role but we would work with Housing and Urban Development to help. Lots of residents didn't want to move out. There were limited additional housing complexes, which led residents to move to other areas of the country.

- 11. How and when did EPA discover the human health risk at the site, if any (i.e. via sampling, third party, other health indicators, etc.)?
 - a. Jim: process started in January 2006 when lot of sampling in zone 1 was seen as an issue by remedial program. Timeline of sampling events, communication w public.
 - b. Morgan: does the timeline show discovery and communication of risk?
 - c. Jacob: site specific timeline developed way before removal program got involved so it's best to ask remedial program.
 - d. Jill: how did the removal program get involved?
 - e. Brad: I was the 1st OSC in removal program. End of June, early July? We were requested to go out to housing facility in E. Chicago. Previous sampling showed elevated surface soil lead. We went out as a group, Regional Administrator too, I think. We did a walk through the community. We looked for any initial quick steps we could take to limit direct contact with soils. We could see soil exposed at residential area, play lots, general area. We wanted to do quick covering of areas 1st without huge work. We put down yard mulch on over exposed soils to initially prevent any contact. There were children out in the yards playing. We were out there for several weeks putting out mulch. CIC came up with flyers and signage to let people know what's going on. That was the very beginning and then we grew from there as more information came out. Then we looked at dust in home then started cleaning of homes. In the middle of the scenario, mayor decided to evacuate housing complex creating whole new issue to deal with. My 1st involvement was in summer in 2016 cleaning units. Towards the end, people started to move out, E. Chicago HUD tried to help them find housing. Lot of people on housing vouchers, hard time finding places to live. My job ended when all units were clean.
 - f. Jill: previous sampling showed high levels of lead that prompted site assessment. What were those dates?
 - g. Brad: don't know off hand. Assuming came from remedial program.
 - h. Jim: 2012, I believe, sampling property where there was emergency level. We did receive list of properties from remedial and then we took early action in 2012. We prioritized high level properties in 2012.
 - i. Jacob-2012 and 2009 I think.
 - j. Jill: but E. Chicago housing wasn't sampled at the time?
 - k. Jim: yes it was and consent decree was already in place. Removal actions performed by remedial. Initial high level prompted us to clean by mayor and led to renegotiation of consent decree. Our initial discussion w/ remedial, removal actions in zone 1, did not require relocation, need to confirm that w/ remedial team. Then mayor wanted zone 1 evacuated, that changed all the plans being made. Led to renegotiation consent decree and is still on going to the best of my knowledge.
- 12. How and when did EPA communicate human health risks to the community, if any?
 - a. Who communicated the human health risk and who was involved in this risk communication? [Auditor's note: question already addressed above]
 - b. What is the general chain of communication within EPA internally for when a release or contamination happens at a site? Is this a standard process or site dependent?

- c. Jim: we have sit reps (situation reports). Probably through zone 1 process, we have daily calls with regional and HQ mgmt. Sometimes twice/day 8-9am w/ HQ and later with regional mgmt. to discuss any pressing issues. May have other calls that day to inform HQ. 3x/week then 1x/week as process goes by. Calls with regional management 2x per day throughout removal process.
- 13. Was this chain of communication used for this site as well? Please explain.
- 14. Who or what groups did you communicate with about risks at this site? How did you determine who to communicate with? How do you determine whether the risk information is understood by the community?
 - a. Jacob: everything goes through a review process and with public affairs. It's a give and take conversation with the community. For risk communication, we were providing site specific info. This is what's going on. As we are more engrained in the community, we took what community was telling us and we would modify our public meetings with the community. For example, they would ask what's the difference between RCRA and CERCLA. We looked at what was important to the community. Did presentations. Water division came in. Community was concerned so we would have water experts come in to provide requested info by community. We had several mtgs where experts come in (Miguel lead in Flint came in), and met w community residents that were concerned. We modified our approach as we were more engrained to community.
 - b. Keith: when decision was made, we had a very large presence, we had over 200 people of OSCs CICs, contractor staff performing removal actions, air monitoring, documenting, initial flurry from removal-knocking on doors continually to provide risk info. Then we would ask them we would like to clean your homes. Lots of reservations and saying no. Then when people said yes, we would bring them into trailers. Lots of logistics set up. Access agreement done. Not electronically. Interviews done. Case managers assigned to individual families. Specific phones purchased that residents can call 24/7 about relocation process. Set up whole infrastructure to communicate risk. Within the process, we could see how stressed out they were. Set up support structures, local churches, support services. Through clean up that lasted 3-4-5 days, we would have constant contact. If they had issues, we would direct them to right support.
 - c. Jacob: **held classes for Superfund 101**, what can we do and can't do. Community asked us to do Superfund 101 class since Superfund is a big program and lots of questions came our way. Residents could get info from map viewer on soil on their block. Is the soil they're bringing in from a clean area?
 - d. Jim: map viewer is a map with large database behind it. Shows every single sampling point that remedial collected as baseline. Can click on property and track what property we sampled for lead, how many times we knocked on their door. Shows every sampling event and communications with residents. Some of the info is only available to EPA staff bc PII. Web viewer shows 2000 ft view that shows progress without PII. Can give you access to web viewer.
 - e. Jim: we communicated with residents primarily. We did a lot of public meetings.

 Offered blood lead testing fairs. Communicated with churches and communities to let them know what's going on and they were trusted community members. If residents

weren't communicating fears to us, we were trying to get them get it out of the community.

- 15. What specific program criteria and/or EPA guidance did you use for risk communication activities for this site? (i.e. internal guidance/policy/procedures documents) Did you use any criteria or guidance from outside the EPA?
 - a. Jacob: CIP already developed when we got involved. We fell in line with CIP that remedial already set up. We want community involved as early as possible to make things easier. Same page. No miscommunication. We followed CIP and in 2017 they did a new CIP I think. Re-did interviews w community. Now there's older & newer version. Site specific community involvement strategies to facilitate RC and outreach --- Janet has all that stuff since tasked to be main POC for that effort
 - b. Jim: we work with ATSDR and Keith, our toxicologist, E. Chicago Health Dept. a lot of info derived from these agencies and they give us input on how to deliver that message and how we're communicating with public. Keith helped us tremendously getting these documents reviewed and coordinating w/ Agency.
 - c. Keith: letters reviewed by every health agency and HQ. Lot of input by lot of stakeholders before it went out.
 - d. Jim- any issues when presenting to public was unclear, we would revise to clarify. Weekly calls held by ATSDR. List of topics and agenda items. Related to how EPA was communicating. Jim led couple calls. Mostly led by ATSDR. Weekly health conference calls set up.
- 16. What documentation or records were kept related to (1) sampling or identification of human health risks and (2) risk communication activities for this site?
 - a. Jim- majority of our communication is seen and documented in web viewer. We took meticulous notes on paper and in our records center.
 - b. Jacob: Janet Pope and Charles Rodriguez were original R5 CICs with site since before NPL. Any communication with public in 2 huge binders at Janet's desk.
- 17. Were there any *delays* in communication or times when the risk was *not* communicated to the impacted community for this site?
 - a. If so, what were the contributing causes for the delay or lack of risk communication to the impacted community?
 - b. How did you measure the effectiveness and timeliness of risk communication for this site, if at all? What tools, if any, were utilized to do so?
 - c. Jacob?: We wanted to get info out ASAP but can't speak to prior to 2016. From our standpoint, we modifided our approach to communicate with community. **Now we report verbally on preliminary results prior to them getting validated.** We want to give them info ASAP.
 - d. Jim: making calls to give preliminary results was directed by RA at the time.
 - e. Jim: I think inherently, there probably were delays, but we were so integrated with the community. Management was pushing us to knock on doors willy nilly. ATSDR set up specific list of types of families. They set up target residences with children under age 7, pregnant women, we received those metrics from housing authorities. We had that initially. Management keen on asking ASAP. If we couldn't get to sensitive populations, they were asking us. We said they said no, they don't want anything to do with us.

- Management will tell us to go ask again. We cleaned up 319 out of 332 homes. We were tracking metrics. Not overall goal but senior management was pushing us to do it quickly especially with sensitive populations. Kind of unusual situation because communicating in emergency situations, there's lots of eyes on it that pushed us. Not comparable to other types of operations.
- f. Jacob: as a part of our SIT REPS we tracked any interactions with community. We had hotlines. Weekly SIT REPS then set up internal EPA SharePoint site. If CIC got a phone call and didn't know who to ask, we would log it into SharePoint site. Track that info of who we reached out to who. Whether RC was successful? Really hard to point.
- g. Tina: go out there as soon as possible? Is that a few days, weeks?
- h. Jim: ASAP related to which activities.
- i. Tina: for example, knocking on doors ASAP. Assuming you had sampling results that needed cleaning.
- j. Jim: no, no, in the beginning, after Brad was out there, we had a concentration of soil in zone 1. Indoor dust sampling decision was made by management that we were going to knock on doors to try to get in and access to homes to communicate potential risk and track exposure to indoor dust. We were not basing it on cleaning indoor dust sample. When we knock on doors, we were offering to clean every single home in zone 1. Decision was already made. We actually had trailers in complex. We prioritized sensitive populations. We would ask them to clean their homes. Was not based on sampling. we were offering to clean 100% of homes in zone 1. The sampling we did post-cleaning to verify dust loading. In removing POTENTIAL risk. We were looking at dust loading, not concentration but what was the percentage of dust we were removing from home. Not from concentration. We understood soil was contaminated. Remedial done as part of due diligence of soil contamination. Cleaning wasn't triggered by sampling results.
- k. Tina: What was the trigger then?
- I. Jim: management told us to knock on doors
- m. Tina: there must have been some risk?
- n. Jacob: what made us knock on doors. Risk communication isn't knocking on doors, it's making phone calls, etc.
- o. Tina: Not type of communication. What I'm trying to figure out is what is as soon as possible. What was it that triggered knocking on doors? If it was senior management direction, what was their trigger to ask you to do it.
- p. Jim: previous remedial sampling specifically for zone 1. High concentration in the surface lead. Large basis for this. We'd been out here sampling because there were already plans in place by PRPs with EPA oversight. All previous work 2009 and below, about EPA involvement, there was information that remedial was providing them. We were building on that, because of that information, because of potential tracking, we are offering to clean your home. If there were any additional questions, we would try to address those. Spells out why section 8, why we are there, because of lead and arsenic exposure—to give rationale from risk perspective. We can provide that as well.

- 18. Ran out of time. Jim Mitchell confirmed that he would be the point of contact for document requests including: relocation guide, examples of situation reports that went up to management, USS Lead site community outreach timeline, web viewer access.
- 19. Tina requested access to all pol reps.
- 20. Jim recommended we talk to Janet and Charles (CICs) to get a deeper dive into communications and to also speak with remedial PMs for more risk communication information and sampling from management's perspective. Talk to Tim Drexler and Sarah Rothes. Tim retired a year ago.
- 21. Jacob said they can try to give us access to a SharePoint site since we do not have one that they can drop all the documents to.
- 22. Jill: if there are things we can get from CIC directly, we can track it down
- 23. Jim: it's a highly complex site that's been around for some time so we want to make sure you get a full perspective. We could be giving you pieces and we may not have given you as much clarity as we'd like to. We can direct you to the right people.
- **24.** Jill requested final results from the site assessment; Jim said that remedial would have the cleaning and follow up sampling results

[Auditor's note: due to time running out, the questions below were not asked]

- 1. What other challenges did you face in terms of risk communication for this site, if any?
 - a. If there were other challenges, how did you overcome these challenges?
- 2. What are some other good practices or things that went well in terms of communicating potential risks to the impacted community that occurred for this site, if any?
- 3. Did you receive any feedback from the community, positive or negative, about how risk communication was handled for this site? If so, please describe what feedback you received and how?
- 4. What are the current conditions at the site in terms of:
 - a. Current human health and environmental threats, if any, and
 - b. Current risk communication activities taking place with the impacted community, if any?
- 5. At any time, did you reach out to any external experts or other agencies for support? If so, please further describe the interaction that took place.
 - a. Did you work with CDC/ATSDR at any point? If so, could you elaborate on that relationship and any recommendations they may have provided to you.
- 6. Are there any other internal EPA staff or external stakeholders that you believe we should speak with? If so, who?

^{*}Meeting adjourned*

WP Subject Line: 4/18/19 OEM USS Lead/East Chicago Remedial Staff Interview

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Bo Park	6/3/19	
Reviewed by: Jill Trynosky	8/9/19	[x]: I reviewed this WP and found it satisfactory. (No comments were provided.) []: I reviewed this WP and found it satisfactory. I also included comments in a blue colored font. []: All comments have been resolved.
Edited by:		

<u>Purpose</u>: For each selected site, interview the site's staff to get their opinions on the current conditions, to determine the cause of any apparent delays or lacking communication and/or answer any other questions that arise.

Project Guide Step #: 42

Source(s):

Meeting/Interview Information:

Date & Time/Duration	Meeting Location	Invitation
4/18/19, 1PM – 2PM	conference ID (b) (6)	Link: D.17b - [C] OEM East Chicago Remedial Team Interview 4.18 - Source 1 Meeting Invite.pdf

#	Name	Title/Organization	Contact Information
1	Morgan Collier	EPA OIG Pathways Intern/Program Analyst	²⁰² (b) (6)
2	Bo Park	EPA OIG Program Analyst	215
3	Jill Trynosky	EPA OIG Project Manager	202
4	Sarah Rolfes	Remedial Project Manager	(31
5	Tim Fischer	Remedial Supervisor	(31
6	Thomas Alcamo	Remedial Project Manager	(31

<u>Scope</u>: This workpaper is to document the interview with the Remedial Team at the USS Lead/East Chicago site to get their opinion on the current conditions at the site, to determine the cause of any apparent delays or lacking communication and/or answer any other questions that arise about this site

to answer the objective for this audit assignment [Communication of Human Health Risk at Sites in OLEM Programs OA&E-FY19-0031]. The interview was held on April 18, 2019.

Summary:

- Current site status: housing complex in zone 1 demolished, 3 zones in different stages -zone 1 in the process of determining remedy, zone 2/3 close to being done remediating
 (Details 2a, 14bc)
- 2. Remedial team unclear of when EPA discovered human health risk at site as they got involved in 2016/2017 (Details 4, 10a)
- 3. Site received a lot of attention from EPA HQ and was "all-hands on deck" (Details 6c, 10g, 10l) due to closure of housing complex moving 300 families (Details 10j)
 - a. Housing complex closing was not EPA decision and EPA was prepared to clean up (Details 3n); may have been a political decision by mayor (Details 11a, 17a); mayor characterized sampling results higher than it really was to close housing complex (Details 17a); working with mayor has been a challenge (Details 21c)
 - b. Residents angry prior to closing complex and were forced to move, meetings helped (Details 3m, 12a)
- 4. Multiple EPA staff responsible for communicating with public (Details 3e)
 - a. CICs do a lot of outreach and does a great job (Details 5c,12c, 12e)
 - b. Many methods of communication used: mail, email, newsletters, hotline, CIC phone, door hangers, open house meetings, office on site (Details 7, 12c)
 - c. Not aware of any delays in communication (Details 10a) and received very high satisfaction survey results after cleanups (Details 12b)
- 5. There was lack of certainty and clarity of future land use which affected level of clean up in zone 1 (Details 11b)
- 6. EPA worked closely with other parties such as ATSDR, school board, local and state health departments (Details 5c, 5f, 5g)

Details of the Meeting/Interview:

- 1. Morgan led the interview by giving brief background of project (4 OLEM programs, 2 sites/program for in-depth review, project progress thus far)
- 2. Please provide us with a brief, general background of the site.
 - a. Thomas-remedial was doing zone 3 cleanups, and removal program was doing clean up in zone 2 when I was assigned to the site. Sampling & cleaning up ever since. Now working on mostly zone 1. HUD and E. Chicago <u>demolition of housing complex in zone 1. Remedy decision, public comment ended, now evaluating.</u>
 - b. Sarah's role: responded to 2016 emergency response. Officially assigned Jan 2017 PRM. Oversaw remedial construction, soil sampling, zone 1.
- 3. What was/is EPA's role and activities for this site, if any, versus other parties regarding communicating risks to the impacted community?
 - a. Who is responsible for sampling and identifying human health risks at this site?
 - b. Sarah: EPA contractor does remedial design
 - c. Thomas: through ROD clean up levels, Tim Fischer. EPA sends out letter.
 - d. Who is responsible for communicating with the public at this site?

- e. <u>Sarah-EPA. which staff-depends. I get a copy and talk to people to discuss. Tom or</u> Charles or me.
- f. Thomas-we did lab analysis not XRF. In terms of sampling data, we would get that data and it would get validated.
- g. Tim-since we started response in 2016, few people worked on site. Tim Drexler, Sarah, 2016-2017 working on zone 2 & 3 & communicating w/ residents there. Tom zone 3 to some extent. Catherine Thomas GW communication now. Depends on which aspects of project.
- h. Who oversees the work at this site?
- i. Sarah: EPA. Project managers assigned to diff zones/particular areas.
- j. Tim- then I manage PMs & remedial supervisor.
- k. Thomas- we had 4-5 RPMs when we started cleanup & in 2016, there were 5-6 RPMs. Each had RPM overseeing contractor.
- I. Were there any issues in ensuring consistent messaging to the community by you and other agencies/state departments if working together? If, so please describe them.
- m. Thomas- residents angry, prior to closing of complex. Some tension. Meetings helped to help resolve differences. People living in complex refused to move & were forced to move from complex.
- n. <u>Tim- we worked very hard to say closing complex was not EPA decision. We were prepared to do clean up. Closure of housing complex was not EPA decision.</u>
- 4. How and when did EPA discover the human health risk at the site, if any (i.e. via sampling, third party, other health indicators, etc.)?
 - a. Thomas: I can't talk too much on history. Can discuss removal actions in mid 2000s. Then 2011.. did 21 in total.
 - b. Sarah-3 of us got involved in 2016. Referred from RCRA. Emergency response action 2008
- 5. How and when did EPA communicate human health risks to the community, if any?
 - a. Thomas-Clean up of zone 3 in 2016. We had public mtg in Sept. 24th. <u>Charles & Janet talk to residents.</u> Large effort in getting word out. Contacted public regarding doing sampling in zone 2
 - b. Tim-any effected residents we are going reach out to them specifically. As a general rule, we try to communicate w anyone interested in the site. Fact sheets, develop list of names interested in site
 - c. Sarah-Janet and Charles do lots of outreach esp. w CIP. 2018-updated CIP again. I was part of interviews done last yr. 24 people. We talked to them and brought out outreach materials. Ask if anybody wants info. We prepared fact sheet for communication action groups , flyers. ATSDR also works on site w us. They did a flyer that gets sent with letters we send to residents. We worked closely w ATSDR. 2017 every month had public mtg & ATSDR was always there too
 - d. Thomas- Superfund jobs training institute 2016? Brought in local individuals to teach how to work in hazardous waste & some got hired as contractors.
 - e. Sarah-some still work there today.

- f. Thomas- fall 2016 I was involved with school board president, E. Chicago & state health dept. ATSDR, etc. lot of it to do w zone 1 closing of the complex. Lot of outreach done then. Especially in 2016 w the clean up.
- g. <u>Sarah-2017 biweekly multi agency coordination calls local, state health agencies, city</u> officials, ATSDR, to coordinate efforts. We had flyers for blood lead testing.
- 6. Do you consider the surrounding community an Environmental Justice (EJ) community?
 - a. Thomas-yes
 - b. Did you have to adjust the communication taking place at the site?
 - c. Thomas- <u>head of EJ came out & talked to residents</u>. We didn't change flyers but we were well aware it was EJ community. In all honesty, 2016 it was all hands on deck with EPA. Many ppl involved.
 - d. Tim- no specific adjustments were made.
- 7. What methods of communication were used (if not previously stated)?
 - a. Sarah-Any and every communication. Mail, newsletters, EPA was on site every day & I'm in residents' homes. Hotline numbers, sign ups. Janet has answered phone weeknights & wknds. Email residents. Leave material on doors on door hangers if they're not home. We work very hard to get them that material. Link: PSSC-USS Lead East Chicago Draft Memo.docx
 - b. <u>Tim-we have location right there in community to ask questions in the school.</u>
 - c. Thomas-had # of Saturday open house meetings.
- 8. What specific program criteria and/or EPA guidance did you use for risk communication activities for this site? (i.e. internal guidance/policy/procedures documents) Did you use any criteria or guidance from outside the EPA?
 - a. Thomas: try to get back to them ASAP but no policy I'm aware of. If I receive call, we call back immediately.
 - b. Tim-no written requirement. But within day or two generally.
 - c. Thomas-plan Charles & Janet developed CIP. We follow that.
 - d. Sarah- The new CIP is in both Spanish and English
- 9. What documentation or records were kept related to (1) sampling or identification of human health risks and (2) risk communication activities for this site? What is the best way for us to receive needed documents?
 - a. Thomas-web viewer. We have to be little careful putting records to public, but we have nice web viewer-what areas are contaminated. I would highly recommend you access to web viewer.
 - b. Thomas-we have separate one specific with addresses & stuff like that.
 - c. Morgan-web viewer has both remedial and removal actions recorded
- 10. Were there any delays in communication or times when the risk was not communicated to the impacted community for this site?
 - a. <u>Tom&Sarah- not that I'm aware of since 2016/2017 when we started.</u> We focused on getting out data, get sampling done to make decisions on properties.
 - b. How did you measure the effectiveness and timeliness of risk communication for this site, if at all? What tools, if any, were utilized to do so?
 - c. <u>Sarah-we have that memo that we got for Superfund. About when we communicate to residents. We have some policies recently</u>

- d. Tim- not metrics necessarily.
- e. Morgan-memo on webpage?
- f. Tim-we can get that to you.
- g. Thomas-cleaning homes in zone 1 & zone 3 & sampling, initially we had daily mtgs then less frequent. How many homes we visited. Called Sit reps. I've been doing 30+ yrs and it was all hands on deck esp. in fall of 2016. Any type of resources we needed to get, we got. We started zone 3 cleanups very, very quickly. It was all hands on deck.
- h. Any HQ staff came?
- i. Fall of 2016 Pruitt came, governor came. Albert Cal- came to at least 5 from HQ- and some other HQ. HQ conference call updates. Nick came.... Quite a bit of communication with HQ late 2016- up to daily calls
- j. Thomas-Closure of housing complex prompted this. And moving large # of families- 300 families. Closure of school. Demolition. Lot of publicity in the area. Became one of Pruitt's priorities and rest is history
- k. Morgan-Policy changes made to site?
- I. Thomas-we accelerated everything. We did only lab sampling. accelerated removal program to get to zone 2. Mtgs w mayor... not policy changes maybe but unusual compared to your usual SF site.
- 11. What other challenges did you face in terms of risk communication for this site, if any?
 - a. ?-Zone 1 I can only speak of. We could have cleaned up housing complex & not displaced individuals. Maybe political things behind the scenes. But EPA was prepared to clean up but w mayor closing it, it became much more difficult RC issue.
 - b. <u>Tim-along w that in zone 1, lack of certainty and clarity of future land use- perhaps led to challenges.</u> At different times in cleanup process, received inconsistent messages from city-industrial use commercial use. All these affect level of clean up in zone 1
- 12. What are some other good practices or things that went well in terms of communicating potential risks to the impacted community that occurred for this site, if any?
 - a. Sarah-how we are going to protect them. Public mtgs- we answer ALL questions at meetings. We stay with them until all questions are answered. We had less people coming to public mtgs bc they get answers when we do house visits.
 - b. <u>Tim-we got very high satisfaction survey results</u>. <u>Both zones we conduct survey after cleanups</u>. All ratings 9 out of 10.
 - c. Thomas-office in community in school-pretty catastrophic for school district. Availability of Charles and Janet. Cat & Sarah has been instrumental on RC and helping community understand what's going on with cleanup. Office has been very valuable. Link: PSSC-USS Lead East Chicago Draft Memo.docx
 - d. Sarah-we have multiple community groups & have certain feelings & don't always get along & everyone will come to mtg. Not playing favorites & it's a neural location
 - e. Thomas- when CIP was developing, we brought in civic leaders & residents, successful bc we got a feel for why their community groups do not like or trust each other. Janet Charles done fab job through that. Also provided Technical assistance grant to one of the groups. Charles & Janet work has been fantastic.

- 13. Did you receive any feedback from the community, positive or negative, about how risk communication was handled for this site? If so, please describe what feedback you received and how?
 - a. <u>Sarah- zone 2,3 ppl want a clean yard. Our crews do a great job & looks good when</u> they're done. We do get clean up requests even if they don't need to get cleaned up.
 - b. <u>Tim- always some folks in public mtgs who aren't happy w level of clean up & think there's always more we can do & want us to deal with lead based paint outside of CERCLA purview.</u>
- 14. What are the current conditions at the site in terms of:
 - a. Current human health and environmental threats, if any?
 - b. Thomas- in zone 1 -essentially covered so there's unacceptable contaminants. We are in process of determining remedy.
 - c. Sarah-zone 2,3 implemented remedy, doing clean up. Zone 3 -7 residents left to do. Zone 2- 160 left to do. Some homes we haven't had access to sample.. we are very close to being done remediating zone 2,3 homes.
 - d. <u>Current risk communication activities taking place with the impacted community, if any?</u>

 Thomas- yes in zone 1 I've had 2 public mtgs. 1 couple wks ago. Bc of gov shutdown, we decided to have another 1 in zone 1 for remedy for zone 1. 2 public mtgs recently regarding remedy. <u>Link: PSSC-USS Lead East Chicago Draft Memo.docx</u>
 - e. Tim-open house recently in zone 2. Newsletter put together recently & fact sheets too.
 - f. Sarah- almost done in zone 2 sampling & as we get results we call them and send them results in mail
- 15. At any time, did you reach out to any external experts or other agencies for support? If so, please further describe the interaction that took place. other than ATSDR?
 - a. Thomas- we had mtgs w E. Chicago health dept. & state health dept. Particularly in 2016 when we were doing blood lead level studies
 - b. Tim-Keith in our office also has provided risk analysis for us
 - c. Sarah-last summer we saw decline in # of ppl getting blood lead tested so EPA coordinated w health depts to do blood lead testing at the site. And we had event. EPA did a lot of the outreach. Fusinski (Keith) risk assessor. Works for EPA- right now stationed in Michigan? R5.
- 16. Are there any other internal EPA staff or external stakeholders that you believe we should speak with? If so, who?
 - a. Sarah-Janet & Charles.
 - b. Tim-Michael Burkoff was previous RPM. Still working for EPA
- 17. Jill- closure of housing complex- EPA data how much used?
 - a. Thomas- sampling data was reason mayor wanted to close it. I don't know if there was politics involved.. initial remedial design data was what prompted mayor. When mayor was saying why complex needed to be closed, he focused on 1 or 2 sampling results that was much, much higher than most of the sampling results & therefore characterizing results higher than it was really
- 18. Jill-did you reach out to local or gov decision makers?

- Sarah-director of redevelopment, parks dept. ... met w me and contractors.. we meet biweekly or monthly to discuss ongoing remediation and status and if there are any issues
- b. Thomas- in 2016, there was a number of agencies.. we coordinated with IDEM for cleanup. Every couple weeks w school board, ATSDR, IDEM, city council
- c. Sarah-one of attorneys at mayor's office always attends public events.
- 19. Jill-communication of human health risks at site-did you face any technology-based problems in terms of getting info out?
 - a. Sarah-I don't think so. Only issue we had getting info out is when we can't find property owner. Cant get a hold of them. Not really technological issue.
- 20. Jill-based on EPA involvement, has anything changed in remedial program in R5 or EPA as Agency based on this site, as far as communication or sampling protocols?
 - a. Tim- I don't think so. There were unique things but in the end, we followed Superfund's typical process. Sampling, cleanup. No broad changes we made.
- 21. Jill-anything you would've done differently looking back?
 - a. Sarah- since 2016 response, probably not. Been calling residents right away and going to their homes right away.
 - b. Tim-we go above and beyond in terms of outreach. Newsletters, office in neighborhood, fact sheets, people out in field every day.
 - c. Thomas-better relationship with the mayor. He can be difficult at times. Has been challenging. Relationship has gotten better.
 - d. Tim- not sure we could've done anything better though
- 22. Jill-have you had to respond to residents who think they were exposed to risks much earlier
 - a. Thomas-heavily industrialized area-steel mills, etc. they think they've been contaminated from general area.
 - b. Tim-housing complex built on top of smelter. That's a fact though, right? Maybe disagreement of when EPA became aware of problem & wasn't listed until 2009. That's when process of looking at site really started.
 - c. Thomas- # of residents live in zone 1-they feel horrible that they lived down this and there was lead contamination since the 70s. It's a tragedy.

^{**}Meeting adjourned**

East Chicago, IN Site Visit 5/7/19 WP

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Allison Krenzien	7/18/19	
Reviewed by: Roopa Mulchandani	8/19/19 9/3/19	[]: I reviewed this WP and found it satisfactory. (No comments were provided.) [x]: I reviewed this WP and found it satisfactory. I also included comments in a blue colored font. What does "IWM consultants" stand for and who are they? See purpose [x]: All comments have been resolved.
Edited by: Allison Krenzien	8/21/19	The IWM piece must have been a holdover from another WP. I don't know what that was supposed to mean. Deleted the phrase. Also added Source 1 to table. (It was an oversight I caught.)

<u>Purpose</u>: To interview regional staff regarding the USS Lead site on current conditions, communication activities, and other related questions.

Project Guide Step # : 42

Source(s):

Meeting/Interview Information:

Date & Time/Duration	Meeting Location	Invitation, Agenda, Questions (If applicable)
June 25, 2019 2-5PM Link: Link: INDEX	455 E. 148 th St., East Chicago, IN 46312	Link: D.30 - East Chicago Site Visit 6.25.19 - USS Lead-East Chicago Itinerary.docx

#	Name	Title/Organization	Contact Information	
1	Tina Lovingood	EPA OIG Land Director	²⁰² (b) (6)	
2	Allison Krenzien	EPA OIG Program Analyst	303	
3	Jeff Lagda	EPA OIG Public Affairs Specialist	202	
4	Jill Trynosky	EPA OIG Project Manager	202	

5	Morgan Collier	EPA OIG Program Analyst	202 (b) (6)
6	Jason Elkins	EPA OIG Multi-media Specialist	202
7	Charles Brunton	EPA OIG Program Analyst	202
8	Sarah Rolfes (SR)	EPA Region 5 Project Manager	312
9	Janet Pope (JP)	EPA East Chicago Community Involvement Coordinator	312

Source(s):

#	Description/Title	Source Document
1	East Chicago Trip Itinerary	<u>Link:</u> D.30 - [RWC] East Chicago Site Visit 6.25.19 - USS Lead- East Chicago Itinerary.docx

<u>Scope</u>: Meeting covered questions/discussion about the USS Lead site in East Chicago, Indiana and a site tour.

Conclusions:

- During Calumet Days at Riley Park, the EPA arranges blood lead testing and the state donated money. The EPA did the leg-work for the testing and were able to test more than 50 people. (Detail 8)
- They test the remediation area for dust, wet down any dry dirt, and have an alarm (at least two when excavating and one during backfill) to notify if there is too much lead dust from the process. (<u>Detail 11</u>)
- Zone 2 was designated as a removal and under a removal action. This included being at 1200 for lead and less than 6 for arsenic. These were the priority in 2016 and only included 128 properties. (<u>Detail 14</u>)
- 4. Zone 3 was designated as remedial and is under a consent decree. Cleanup is done in accordance with a mix of priority sites and sampling results. (Detail 15)
 - a. Public spaces were prioritized as a part of this. (Detail 15.a)
- Sampling was fast-tracked if there was a pregnant woman or a child on the property. The EPA would call or visit in person to give the results. They the remediation design was also fasttracked. (<u>Detail 16</u>)

Details:

SR led the site visit with input from JP. Observations/statements were made by SR and JP unless otherwise noted.

- 1. Sometimes remediated yards are fenced off to protect the sod. They water the sod for about two months and if it doesn't take then they will re-lay it.
- 2. Team question: How were the zones for the project drawn out?

- a. Answer: It was done according to the lead levels. The highest were in zone 1, then zone 2, and the lowest were in zone 3. That decision was made by Michael Berkoff.
- 3. The homes are mostly older, single-family homes.
- 4. Team question: Are you ever contacted by someone looking to buy a home in the area?
 - a. Answer: No, it is usually by someone wanting to sell their home if we hear from anyone.
- 5. Analyst note: In zone 3, grass seemed healthy and green. There were plenty of trees and plants.
- 6. Whether the front yard, back yard, or both are remediated depends on the sampling results.
- 7. The city is also in the process of removing all lead lines to homes.
- 8. During Calumet Days at Riley Park, the EPA arranges blood lead testing and the state donated money. The EPA did the leg-work for the testing and were able to test more than 50 people.
- 9. Team question: Are there any issues raised about home drainage being different after the remediation?
 - a. Answer: Some residents have brought it up, but the survey data is all normal. This May has been very wet and so it may be coming up from drains.
- 10. Zone 2 has more renters and vacant lots than zone 3.
- 11. People don't have to move out of their homes during remediation. They test for dust in the area, wet down any dry dirt, and have an alarm (at least two when excavating and one during backfill) to notify if there is too much lead dust from the process.
- 12. The native sand depth is shallow which can affect how much excavation is required. Contractors take as much around the trees as they can, but they don't want to disturb the root systems too much.
 - a. However, the trees take up contaminants, too. The contractors also leave a 1-to-1 slope around the sidewalks. They will go as far down as necessary to get rid of contaminants—there is no institutional control.
 - b. To determine a consistent depth, they use string line and measure it. That depth is verified with a surveyor. If they miss their marks, they will go back and fix them.
- 13. The city is also doing demolition with "hardest hit" grant money.
- 14. Zone 2 was designated as a removal and under a removal action. This included being at 1200 for lead and less than 6 for arsenic. These were the priority in 2016 and only included 128 properties.
- 15. Zone 3 was designated as remedial and is under a consent decree. Cleanup is done in accordance with a mix of priority sites and sampling results.
 - a. Public spaces were prioritized as a part of this.
- 16. Sampling was fast-tracked if there was a pregnant woman or a child on the property. The EPA would call or visit in person to give the results. They the remediation design was also fast-tracked.

EPA Correspondence at USS Lead/East Chicago

<u>NAME</u>	<u>DATE</u>	<u>Comments</u>
Prepared/Completed by: Morgan Collier	4/27/2020	BB – I have added comments in purple to be addressed.
Reviewed by: Bakari Baker	5/27/2020	[X]: I reviewed this WP and found it satisfactory. (No comments were provided.) []: I reviewed this WP and found it satisfactory. I also included comments in a dark red colored font. []: All comments have been resolved.
Edited by: Morgan Collier	2/20/2020	Details 1: found "residential" language in source doc (paragraph 1). Added source #, page#, paragraph # to reference where information came from.
Morgan Collier	5/27/2020	Accepted/added comments in green.

Purpose: To summarize EPA correspondence the OIG received from the Agency and/or other sources during our site review for the USS Lead Superfund site in East Chicago, Indiana with an emphasis on risk communication activities occuring at the site.

Project Guide Step #41

Source(s):

#	Description/Title	Source Document			
1	Source 1-EPA Response to Concerned Citizen	Link: Source 1-2007 Email Response to citizens' concerns at USS Lead site.pdf			
2	Source 2-Email btwn EPA and IDEM	Link: Source 2-Email btwn EPA and IDEM August 2016.pdf			
3	Source 3-Email btwn Copeland and Pope	Link: Source 3-Email from Copeland to Pope January 1.14.19.pdf			
4	Source 4-IDEM Letter to EPA	Link: Source 4-IDEM Letter Supporting USS Lead Inclusion on NPL.pdf			
5	Source 5-Letter from Copeland to Stepp	Link: Source 5-Letter from Copeland to Stepp 9.10.18.pdf			

6 Source 6-Phone call btwn Ballotti and Copeland

<u>Link:</u> Source 6-Phone Call btwn Ballotti and Copeland 9.24.18.pdf

Scope: The details section gives an overview of the key points from the multiple documents received, as it relates to risk communication activities occurring at the USS Lead Superfund site.

Conclusion(s):

- 1.) EPA has been in contact with various stakeholders/agencies through emails/calls/letters, to include concerned citizens, IDEM, City of East Chicago (Mayor) between the years 2007-2018 in this review (Summary of Details 1-6).
- 2.) In an email OIG reviewed, itdid not indicate that EPA shared preliminary soil data with the concerned citizen who inquired about contamination in East Chicago (See Details 1).
- 3.) EPA wrote IDEM in 2016 to see if they could support the agency at the site, to which they could not, citing the extent of the site. EPA described the contamination in detail and stated that there were some concentrations of lead-contaminated soil, up to 45,000 mg/kg in WCHC (See Details 2).
- 4.) Mayor Copeland states in his letter to EPA Community Involvement Coordinator Janet Pope that he was notified in 2016 of the actual lead levels of lead and arsenic contamination in West Calumet. Limited information on arsenic was provided during this timeframe (auditor's note). (See <u>Details 3</u>).

Details:

1.) Source 1- EPA Response to Concerned Citizen

Copy of an email correspondence between EPA staff Michael Berkoff (USS Lead Site RPM) and concerned citizen (b) (6).

The RPM responded to the concerned citizen who asked about the status of EPA's work at the site and the contaminant levels in East Chicago (Source-1; Paragraph-1; 1st and 2nd sentences).

Response stated that the RCRA corrective action section program had been working on cleaning up the USS Lead facility and when they had completed their work at the facility it was referred to the Superfund Division to address the remaining contamination (which includes residential areas close to the USS Lead facility) (Source-1; Paragraph-1; 3rd and 4th sentences)

At the time of the email, the Superfund program is evaluating the soil data and investigating the potential liability of those companies that operated facilities in the area (both findings are preliminary). Further information on either would require an inquiry by the Region 5 FOIA officers. (Source-1; Paragraph-2; 1st and 2nd sentences)

2.) Source 2- Email btwn EPA and IDEM

EPA (Region 5, Emergency Response Section #3) wrote IDEM (Federal Programs Section, Office of Land Quality) on August 22, 2016 about EPA's anticipated removal actions at the USS Lead site.

In the email it states that removal actions are being taken to address threats to human health posed by lead-contaminated soil in yards and dust within residences at the WCHC. EPA soil sampling during the remedial design process identified lead in the top six inches of soil above the removal management level of 400 mg/kg in 74% of the yards sampled in the WCHC, and above 1200 mg/kg in 32% of those yards, with some concentrations up to 45,000 mg/kg. (Source-2, Page-1, Paragraph-2; 1st and 3rd sentences)

On July 25, 2016, EPA initiated in-house sampling for dust collection to determine lead concentrations in homes, given the elevated levels of lead in the surface soils within the WCHC and the likelihood that lead contaminated soil/dust was being tracked/blown into the housing units. (Source-2, Page-1, Paragraph-2, 4th sentence)

Indoor dust sample results from the first 42 homes sampled, indicate 26 properties exceed the EPA screening level of 316 mg/kg for lead for indoor living spaces. (Source-2, Page-1, Paragraph-2, 5th sentence)

Wipe sample results from Indiana State Department of Health found 6 out of 14 unites with lead levels exceeding EPA's standards under the Lead Renovation, Repair and Painting rule. (Source-2, Page-1, Paragraph-2, 6th sentence)

Recent blood lead study conducted by the East Chicago Health Department found that children in WCHC are at an increased risk for lead exposure (22% or above 5ug/dL compared to the national avg. of 2.5%). (Source-2, Page-1, Paragraph-2, 7th sentence)

EPA is conducting time-critical removal to clean inside of all occupied units (approximately 344) within WCHC that have/or have potential to be contaminated with lead contaminated dust above the risk-based screening criteria for indoor dust from industrial activities. Three steps: 1.temporary relocation of residents, 2.removal of indoor dust, 3.return of residents to units until permanently relocated by HUD. (Source-2, Page-2, Paragraph-1)

EPA asked whether the state has the resources to conduct necessary actions (financial to fund the temporary relocation and pay for work to eliminate the threat posed by lead-contaminated soil in yards and dust within the residences). (Source-2, Page-2, Paragraph-2)

IDEM responded stating that the state does not have the resources given the scope to eliminate the threat posed by lead-contaminated soil in yards and dust within residences. (Source-2, Page-1, Paragraph-1)

3.) Source 3- Email btwn Copeland and Pope

Mayor Anthony Copeland of the City of East Chicago wrote EPA's Community Involvement Coordinator Janet Pope a letter expressing his opinion on the proposed amended to the cleanup plan for the USS Lead Zone Residential Area (Source-3, Page-1, Paragraph-1, 1st sentence).

In 2012, in a series of Public Meetings, Mayor Copeland has stated his preference that EPA remediate all zones of the USS Lead Superfund site by removing all contaminated materials and cleaning to native soils. (Source-3, Page-1, Paragraph-1, 3rd sentence)

After Mayor Copeland was notified in 2016 of the actual levels of lead and arsenic contamination in West Calumet, Mayor Copeland searched for the best possible way to protect residents from lead and arsenic poisoning. In July 2016, the Mayor made the decision to recommend that families of the West Calumet move out of their neighborhood. HUD demolished the structures in the West Calumet neighborhood. The neighborhood was built on slabs, and the City and EPA became aware that construction debris remains below ground level within West Calumet from the demolition decades ago of the lead manufacturing operations that caused the site to be heavily contaminated (Source-3, Page-1, Paragraph-2, 1st)

EPA has nine criteria to evaluate clean up alternatives: (1) overall protection of human health and the environment, (2) compliance with applicable or relevant and appropriate requirements, (3) long-term effectiveness and permanence, (4) reduction of toxicity, mobility or volume through treatment, (5) short-term effectiveness, (6) implement ability, (7) cost, (8) state acceptance, (9) community acceptance (Source-3, Page-2-3)

Mayor Copeland states that Alternative 4D will best protect human health and the environment by removing contaminant soil and other materials down to native soils, complies with Federal and State of Indiana requirements, and is the best long-term solution (Source-3, Page-3, Paragraph-2)

The letter also states that when selecting the best clean up alternative for Zone 1, it's important that EPA doesn't dismiss the human health dangers posted by the presence of construction debris remaining below ground level on the footprint of the WCHC and possibly Goodman Park from the decades old demolition of the lead manufacturing operations. It is highly likely that this construction debris is highlight contamination with lead and arsenic. (Source-3, Page-4, Paragraph-4)

There is a strong demand for affordable housing in the City and the Mayor feels that it should be redeveloped as a residential area after the cleanup is complete. (Source-3, Page-5, Paragraph-1)

4.) Source 4- IDEM Letter to EPA

IDEM wrote a letter to the Acting Region Administrator of Region 5, regarding the proposed inclusion of the USS Lead site on the NPL on June 30, 2008.

IDEM is supportive of US EPA including USS Lead on the NPL. USS Lead consists of sensitive environments, wetlands and habitats known to be used by State endangered species that have been contaminated with elevated levels of lead. Many nearby residential yards to the north of USS Lead may have also been impacted with elevated levels of lead. (Source-4, Page-1, Paragraph-1; 1st, 2nd, and 6th sentences)

Reason for qualification: site meets NCP criteria for listing on the NPL (site scores high to HRS); also the site requires a long-term response action. (Source-4, Page-1, Paragraph-2; List #1-2)

Adding this site to the NPL would allow for the proper and timely investigation of the nature/extent of lead contamination to the sensitive environments, to the yards of nearby residences to the north of USS Lead, and to protect public health and well-being of the area consumers (Source-4, Page-1, Paragraph-3; 1st sentence)

5.) Source 5- Letter from Copeland to Stepp

Mayor Anthony Copeland of the City of East Chicago, wrote the Regional Administrator of USEPA Region 5, regarding the City's redevelopment vision for Zones 1 & 2 of the site and its integration with EPA's work at the site. Zones 1 & 2 have industrial/commercial opportunities, Zone 2/3 have an opportunity to provide quality housing. (Source-5, Page-1, Paragraph-1; 1st and 2nd sentence).

City and EPA work cooperatively with developers and responsible parties to ensure a sustainable and compatible redevelopment that supports ongoing management. (Source-5, Page-1, Paragraph-4; 4th sentence)

6.) Source 6- Phone call btwn Ballotti and Copeland

Phone call on September 20, 2018 between Anthony Copeland (Mayor-East Chicago), Douglas Ballotti (EPA Acting Director-Superfund Division), Kurt Thiede (EPA Chief of Staff to the Regional Administrator).

Discussion was that EPA was ready to issue a Proposed Plan for Zone 1 of the USS Lead Superfund site and wanted to know if the Mayor had any concerns about the time frame, to which he did not. The Mayor wanted to verify that it would be cleaned to residential standards, to which EPA said he signed a letter to the Region 5 RA (Cathy Stepp) that Zone 1 would be developed for industrial/commercial purpose. Mayor clarified that he wanted the site cleaned to residential standards in case current development plans do not materialize. EPA said that they plan to propose Zone 1 to residential standards. (Source-6, Page-1, Summary of Paragraph)

USS Lead Presentations

<u>NAME</u>	<u>DATE</u>	Comments
Prepared/Completed by: Morgan Collier	4/30/2020	
Reviewed by: Bakari Baker	5/7/2020	[X]: I reviewed this WP and found it satisfactory. (No comments were provided.) []: I reviewed this WP and found it satisfactory. I also included comments in a dark red colored font. []: All comments have been resolved.
Edited by:		

<u>Purpose</u>: To cover information provided in the EPA's presentations given to the local community regarding the East Chicago USS Lead Superfund Site.

Project Guide Step #: 41

Source(s):

#	Description/Title	Source Document
1	Briefing on the USS Lead Site	Link: Source 1-Presentation-US Smelter and lead superfund site briefing 3.8.12.pdf
2	Drinking Water Presentation	Link: Source 2-Drinking Water Presentation-08-19- 2017.pdf
3	USS Lead Site Implications Presentation	Link: Source 3-USS Lead SF Site Implications for EC 2009.pdf
4	Indoor Dust Sampling Presentation	Link: Source 4-USS Lead Presentation- Indoor Dust Sampling 091217.pdf

Scope: The details section gives an overview of the key points from the EPA's public presentations, as it relates to the East Chicago Superfund site.

Conclusion(s):

1.) Risk communication is not required during the discovery phase, but it recommended (See Details Section <u>1E</u>).

- 2.) The "Drinking Water Overview Presentation" itself was also more on the technical side, specifically on the slides where it discussed sampling data and LSL values by site. The graphics were small, hard to read, and not coded in an easily understandable way (See Details Section 2G & 2H).
- 3.) In the "Drinking Water Overview Presentation" in 2017, near the end of the presentation, the slide reads that "measuring and controlling lead release is complex" and that EPA is revising the Lead and Copper Rule as science evolves. An anticipated date isn't provided for clarification on this topic (See Details Section 2J).
- 4.) The EPA site team uses the "Superfund Lead-Contaminated Residential Sites Handbook", as guidance for cleaning up the USS Lead site (See Details Section <u>3F</u>).
- 5.) Limited use of visuals in presentations and there were some slides with technical information (See Details Sections 3I, 4Cii, 4Cv).
- 6.) Human health and environmental risks were not addressed on some of the presentation slides (See Details Sections <u>3L</u> & <u>4E</u>).

Details:

<u>Section 1-Source 1-The presentation for the US Smelter and lead superfund site briefing</u>, given on 3.8.12

- A.) States that there were multiple polluters in the area: USS Lead, Anaconda Lead/International Refining, DuPont (PDF pg.3)
- B.) RCRA Action done in 2002 (PDF pg.3)
- C.) Removal actions performed in 2008, 2011 (excavation and off-site disposal, 29 total addresses) (PDF pg.3)
- D.) 47% yards need remediation (PDF pg.4).
- E.) Poster of Community Involvement Activities throughout the Superfund Remedial Process (during the discovery phase, it states to conduct risk communication as a recommended activity). (PDF pg.6).
- F.) Residential Lead Cleanup based on 2003 guidance for excavation and off-site disposal (PDF pg.7).

<u>Section 2-Source 2- Drinking Water Overview Presentation</u> given by Miguel A. Del Toral (Region 5) on 08-19-2017

- A.) Went over safe drinking water act, sampling challenges, and how to reduce lead in water lines (PDF pg.2).
- B.) Discussed the three conditions that need to be met in order for a contaminant to be regulated: contaminant needs to have an adverse effect on human health, contaminant is known to occur at a high level of concern, and regulating it provides a meaningful opportunity for risk reduction (PDF pg.3).
- C.) Went into the differences between max contaminant levels and max contaminant goals, and that EPA has set MCL's for 41 of the 71 of the regulate contaminants (PDF pg.6).
- D.) In E. Chicago, lead isn't coming from the water source, water treatment plant, or water mains. Lead comes from the service lines and home plumbing, meaning it can't be removed from the plant like other chemicals that are found in the source water (PDF pg.7).

- E.) The available treatment at the plant cannot reach 100% reduction of lead and therefore cannot achieve zero risk (to do this they would have to remove lead service lines and galvanized iron pipe and all leaded pipe and all leaded plumbing components in home) (PDF pg.8).
- F.) They also talk about other options like point of use water filters and removing lead bearing plumbing (PDF pg.10).
- G.) Slide depicting 10 graphs that each represent sampling conducted during the months of June and September/October, and points out that each home is different. The number of times a peak lead is captured by a sample bottle is recorded [Auditor's note: graphs were hard to read as they were small on the slide and the data was not easy to interpret without prior knowledge on the topic area] (PDF pg.12).
- H.) Slide depicting sampling data in a different view than the previous slide. [Auditor's note: the slide does not describe the risk associated with minimum or maximum LSL values on the graphic, or what the data means in terms of public or environmental health] (PDF pg.13).
- I.) The comparison between the permanent and temporary fix was to. A) Permanent: replace any lead service line into the home and plumbing fixtures in the home (range in cost was between \$3K-10K), B) Temporary: use a certified tap filter which removes 99% of lead (costs \$8 a month) (PDF pg.14-15).
- J.) EPA is revising the Lead Copper Rule based on latest science; measuring, controlling lead release is complex (PDF pg.17).

Section 3- Source 3-USS Lead Site Implications Presentation-2009

- A.) Remedial investigation, described as a cleanup study, was conducted in 2010 (PDF pg.4)
- B.) Feasibility study, described as an evaluation of cleanup options, was conducted in 2011 (PDF pg.4).
- C.) Proposed plan, described as EPA proposing cleanup, is scheduled for late 2011 (PDF pg.4).
- D.) Record of Decision, described as EPA selecting cleanup, scheduled for early 2012 (PDF pg.4).
- E.) Remedial design conducted in 2012, remedial action in 2013 (PDF pg.5).
- F.) Presentation talked about the "Superfund Lead-Contaminated Residential Sites Handbook", published in August 2003 by EPA Lead Sites Workgroup, as a technique EPA site teams follows (PDF pg.7).
- G.) Described contamination and how sampling would be conducted through "coarse grid patterns" and sampling down to 2 feet, and that it would be a phased approach (PDF pg.8).
- H.) <u>Techniques described were</u>: composite sampling (front and back yards), individual samples from play areas and gardens, composite samples from drip lines, subset of properties will be samples for contaminants besides metals (PDF pg.9).
- I.) Auditors note: There was not a lot of use of pictures/visuals during the presentation, and for the few that were used, they were technical and used words such as "sample aliquots", without providing the viewer with a definition on the slide (PDF pg.10).
- J.) No Spanish translation was provided on the Power Point presentation.
- K.) Provided a link for the Technical Assistance Grant (TAG) information page (PDF pg.14).

L.) The presentation slide mentioned that play areas and gardens are where people come into contact with soil, however, there was no discussion on the risks associated with lead. Viewer was referred to links and an ATSDR factsheet link (PDF pg.15).

Section 4-Source 4- Indoor Dust Sampling Presentation 9.12.17

- A.) Outline of indoor dust sampling follows (PDF pg.2):
 - i. Dust sampling after excavation
 - ii. Check to see if soil was tracked in prior to cleaning
 - iii. Sampling plan outline the methods
 - iv. Owners/residents sign access agreements
 - v. Lead-based paint screening
- B.) How samples are collected (PDF pg.3):
 - i. Samples taken with a high efficiency particulate air (HEPA) vacuum
 - ii. Filter catches the sample
 - iii. Samples are collected in particular locations (it depends on the properties use); examples include-entry ways, children's bedroom/play area, rooms where residents spend the most time, and basements
- C.) How the sample is evaluated (PDF pg.4):
 - i. Sample is separated into fine and coarse fraction [fine fraction-means it adheres to hands]
 - ii. The filter is sent off to a certified lab for sieving and analysis for lead and arsenic [Auditor's note: no definition was provided for the word "sieving"].
 - iii. If a property exceeds screening levels then that property will be offered cleaning
 - iv. Samples will then be re-taken after the cleaning is performed
 - v. <u>Auditor's note:</u> no visual was provided showing how the sample is processed or what parts of the sample are being sent to the lab, process is not easy to follow for reader without prior knowledge of subject.
 - vi. Pre-Cleaning screening levels were established in consultation with ATSDR/EPA's toxicologist: Lead (316 ppm), Arsenic (26 ppm). Post-cleaning screening levels they have goals to evaluate whether cleaning methods are effective at reducing dust and are using the World Trade Center cleanup levels: Lead (25 ug/ft^2) and Arsenic (36 ug/ft^2). Both the pre and post-cleaning levels are health based (PDF pg.5).
 - vii. Next slide explains what the screening levels mean (PDF pg.6).
 - i. <u>Lead concentration-(1)</u>independent of mass, (2)expressed as milligrams/kilogram (mg/kg) or parts per million by weight (ppm)
 - ii. <u>Lead Dust Loading</u>- (1)Lead concentration, multiplied by the amount of dust on a surface = lead loading value, (2)expressed as micrograms of lead per surface area (ug/ft^2)
- D.) Overview of the Indoor Cleanup Process for Zones 2&3 (PDF pg.7)
 - i. Dust Sampling
 - ii. Initial Interview
 - iii. Documentation of belongings
 - iv. Resident leaves during cleanup
 - v. Deep cleaning for dust

- vi. Sampling to determine effectiveness of cleaning
- vii. Final documentation of belongings and sign-off

 E.) Auditor's note: human health and environmental health risks were not described on the presentation slides.